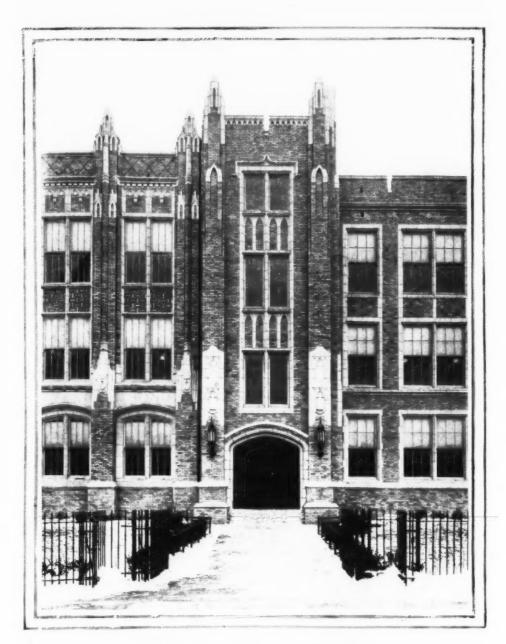
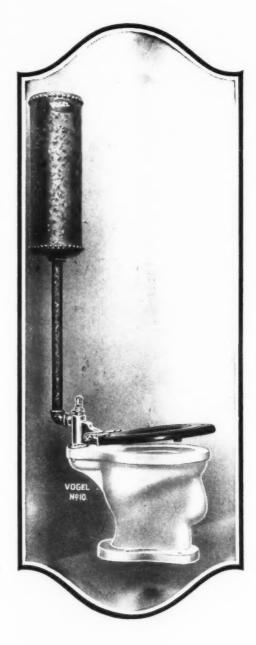
# THE AMERICAN School Board Journal A PERIODICAL OF SCHOOL ADMINISTRATION



February-1929
The Bruce Publishing Company
Milwaukee · Wisconsin

### New Number TEN

### Automatic School Water Closet DESIGNED TO WITHSTAND THE HARDEST USAGE



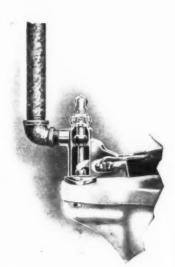
When the closet seat is depressed the supply valve packing is drawn down from the top supply valve seat, and the flush valve packing is brought into contact with the flush valve seat, allowing water to enter the tank through the flush pipe. Upon the pressure of water and air in tank becoming equalized with the service pressure, no more water enters the fixture. This water is held in readiness for the release of the seat.

When the seat is released the rod which carries both supply and flush valve packings is forced upward closing the water supply at the inverted supply valve seat in the swivel at the top. The flush valve, by the same movement, is opened and a strong flush of water from tank to bowl ensues.

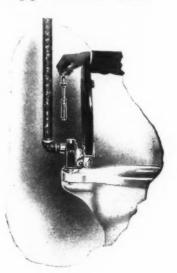
The tank is practically indestructible as is also the flush pipe. The valve is constructed heavily throughout of good quality material and attached to the bowl by a very strong connection. The closet seat is of a durable make and the bowl is of vitreous china.

Economical in the use of water.

The simplest and most durable automatic water closet.



A sample valve was tested 150,000 operations without any appreciable wear



Sold by Wholesalers of Plumbing Supplies Everywhere

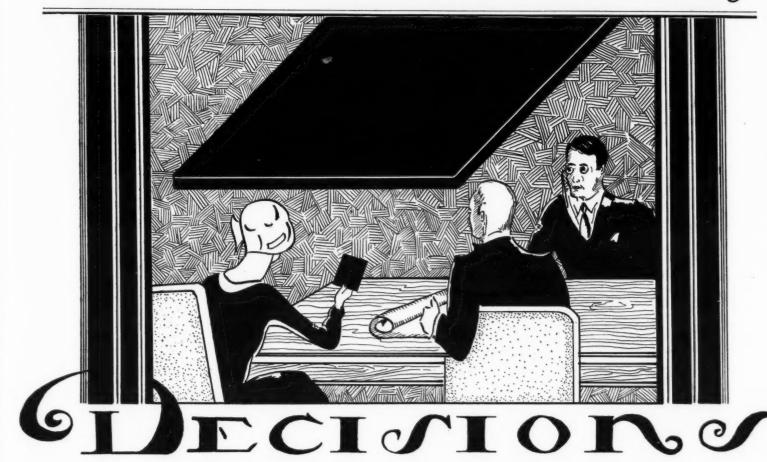
JOSEPH A. VOGEL CO.

Wilmington, Delaware

St. Louis, Missouri



"Pyramid" Natural Slate Blackboards Outlast the Building



Regardless of how large or small the school, the best material is desired. Building committees, architects and thousands of teachers will tell you of decisions that have favored natural products when possible. Consider a blackboard. What other fixture in a school receives the constant wear that a blackboard must stand?

After a day of constant writing on it the board is washed and ready for another day's work. It must be of natural slate to retain its fresh velvet-like finish. A "Pyramid" Natural Slate Blackboard will not warp, crack or become streaked. Schools

nation-wide have enjoyed their superior writing surface for centuries.

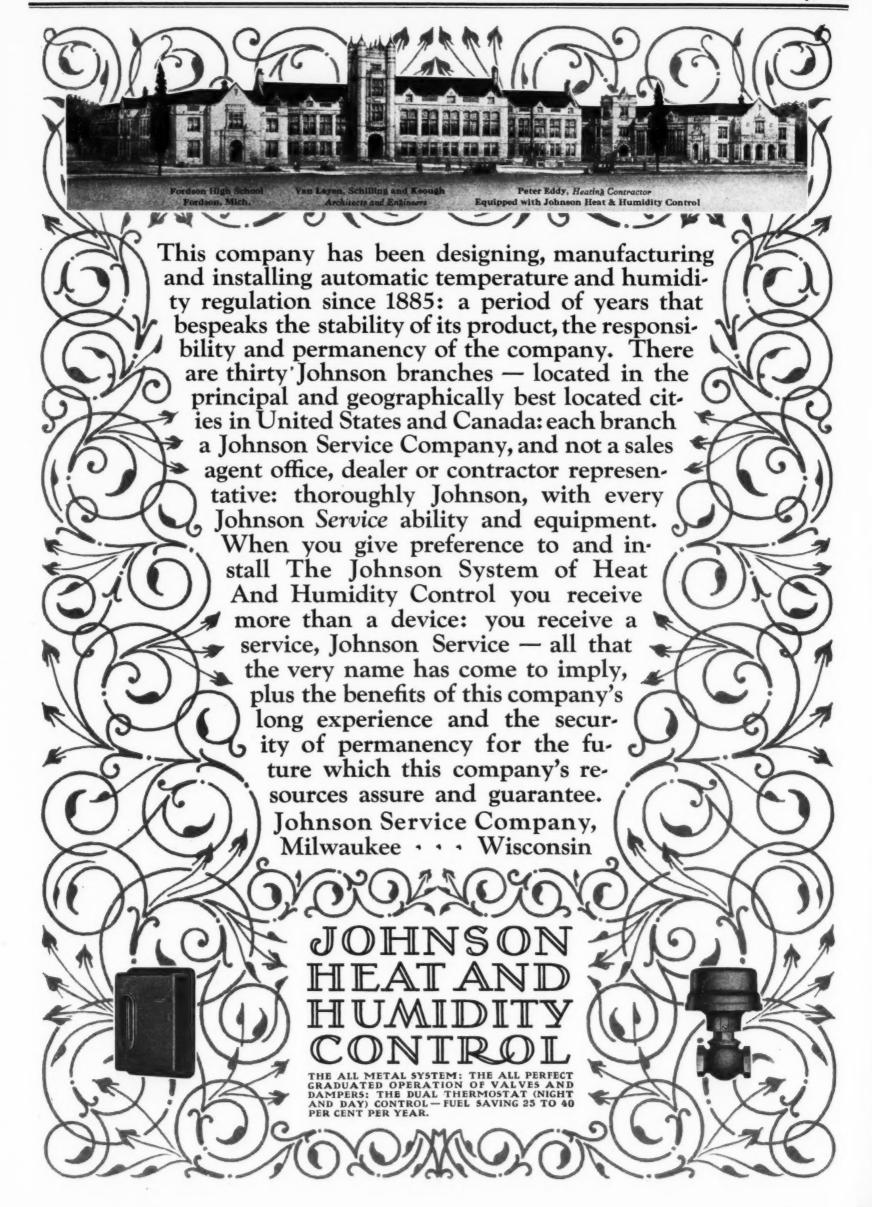
In the consideration of a good black-board your decision should be a "Pyramid" brand natural slate blackboard. Fire, water and wear proof, it has the distinction of "outlasting the building."

A post card will bring you an interesting little booklet "In the Quarries of 'Pyramid' Slate". This story will be of interest to everyone. Your inquiry for prices and information will be handled promptly and will bring to you "Natural Slate for Blackboards", a book containing sizes, information and illustrations.

Natural Slate Blackboard Co.

240 Robinson Avenue, Pen Argyl, Pennsylvania

Branch Offices in all principal cities.





Kewanee is in hundreds of banks

A Kewanee Boiler in your building means money in your bank

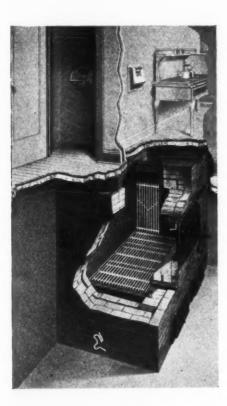
### KEWANEE BOILER CORPORATION Kewanee, Illinois

HISTORICAL NOTE: President Lincoln approved the National Bank Act February 25, 1863, and on the next day an application for a charter for the First National Bank of Davenport reached the Treasury Department in Washington. It was well along in the month of May before the articles of association, prepared in the Comptroller's office, were received in Davenport. On May 25 the subscription books for the new institution were opened, and in three days the capital stock of \$100,000 had been subscribed. The bank began business June 29, 1863.



### Here's What Kernerator Assures

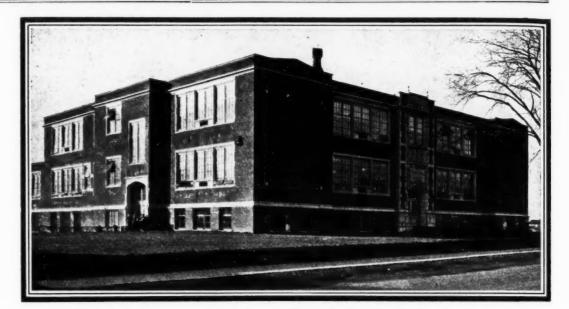
- 1. Overcomes the chief cause of 75% of school fires through trash piles in the basement.
- 2. Banishes the trucking of waste paper and sweepings to the basement.
- 3. Entirely does away with the expense of buy-ing, cleaning, and replacing of garbage
- 4. Provides for instant disposal of refuse from cafe and cafeteria.
- Makes it unnecessary for foul-smelling garbage swagons to call for garbage.
- Provides more sanitary surroundings, and greater health assurance.
- Costs nothing to operate or maintain requires no fuel—an occasional match burns the waste and air-dried garbage.



#### What Is the Kernerator

The Kernerator consists of a brick combustion chamber, with fire brick lining, located in the basement of the building at the base of the chimney. It is constructed when the building is erected, in accordance with clear, detailed working drawings.

ing drawings.
Into this incinerating chamber is built a special arrangement of grates of heavy design with patented by-pass flue to provide proper draft control to insure complete, successful, and odorless combustion of garbage and waste.
Receiving hopper doors are built in the flue, usually located in the wall of service rooms, common corridors, or at some other point easily reached on each floor. The flue serves as a fall way for garbage and waste deposited in the hopper doors, and also as a chimney to carry off the products of combustion during burnings.



### "A great aid in sanitation"

says the Principal of Nathan Hale School

PRESENT day school authorities regard sanitation as one of the major considerations when school buildings are being erected. They know that filthy, germ-breeding garbage cans and unsightly, insanitary trash heaps have no place in the modern institution.

The Nathan Hale Grade School of New Haven, Connecticut, is one of the many schools throughout the country that have solved the problem in a most gratifying and economical manner with the Kernerator. Miss Bessie J. Rattelsdorfer, Principal, writes: "The Kernerator has been in use in the Nathan Hale Grade School for several years and has proved satisfactory in every way. It is convenient as well as a great aid in sanitation."

Garbage, papers, sweepings, and trash of all kinds are simply dropped through handy hopper doors on floors above and fall to the brick combustion chamber in the basement. The accumulation becomes quickly air-dried and is destroyed with an occasional match—no fuel is required.

There are Kernerator school models as low as \$250 and the masonry adds but little more when the regular chimney is used. Send for our new illustrated school book which gives valuable information on uses and installation of Kernerator.

KERNER INCINERATOR COMPANY Milwaukee, Wis. 733 E. Water St.



Garbage and Waste Disposal



Instant, Sanitary, Costless



### 17 Pacifics warm students in "no mean city"

Indianapolis schools were among the first in the country to adopt a system of strict business economy. Boilers came in for their share of close scrutiny respecting cost, operation, and maintenance. Even firing methods must now hold to uniform practice. Just as stoker installations are now standard in all Indianapolis Schools, so Pacific Steel Boilers are considered standard in generating warmth for the comfort of thousands of students.

There are now seventeen Pacific Boilers in ten city schools and one in Warren township adjoining the city district. They are meeting all conditions of the variable and frequently extreme climate existing there. Operating and maintenance economy of these boilers are saving Indianapolis thousands of dollars every season.

For 16 years the leader in the welded steel boiler field, the Pacific will continue to justify this eminence by virtue of its welded, age-defying, fool-proof construction. A letter will bring details and literature on any type of installation in which you may be interested.





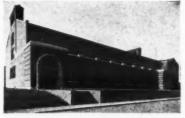
Robert Frost Daggett, Architect; Charles R. Ammerman, Engineer; Freyn Bros, heating contractors. Stoker installation on two Pacific direct draft steam boilers of 13,000 sq. ft. capacity each. Exterior and view of boiler room.



Indianapolis Grade School No. 60 John Rotz, Engineer; Freyn Bros., heating contractors. Stoker installation on two Pacific direct draft steam boilers of 6,500 sq. ft. capacity each.



Indianapolis Grade School No. 8 John Rotz, Engineer; Freyn Bros., heating contractors. Stoker installation on two Pacific direct draft steam boilers of 6,500 sq. ft. capacity each.



Indianapolis Grade School No. 84 Kopf-Deery, Architects; John Rotz, Engineer; Freyn Bros., heating contractors. Stoker installation on two Pacific direct draft steam boilers of 10,000 sq. ft. capacity each.

# HEATING

MAKE AND RADIATORS A LOGICAL COMBINATION CAPITOL



PACIFIC STEEL BOILER CORPORATION Factories: Waukegan, Ill., Bristol, Pa.

Sales Offices in 58 Cities Division of United States Radiator Corp., Detroit, Mich.

## Von Auprin

Self-Releasing Fire Exit Latches

Sweets, Pages B2605-B2609

AIA 2705



If anyone is entitled to full protection in time of panic, certainly school children are. That is the reason Von Duprin latches are standard equipment on the school houses of so many cities and townships.

### VONNEGUT HARDWARE CO. Indianapolis, Ind.

Educators will be welcomed at the Von Duprin exhibit, space 291, at the N. E. A. convention in the Cleveland Auditorium, February 23 to 28, inclusive.

If your Fire Marshal has instructed you to have your old schools equipped, we particularly urge that you see our exhibit, as we can be of great assistance to you.



## ... they never invited him again!

How a window shade roller ruined the social career of W. Winternitz

WILLARD WINTERNITZ was in the seventh heaven. At last, he had been invited to tea at the Van Allrich's—and Mrs. Van was showing him her famous collection of Early American furniture and glass.

"Oh, do let me put up the window shade," cooed Willard, "we need more light on this lovely bit of Stiegel glass."

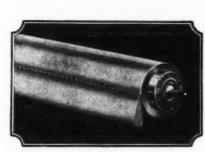
He touched the shade. Bing!—up it flew to the ceiling. The cord wrapped itself around the roller.

"Let me fix it," cried the gallant Winternitz. As

lightly as a lad of two hundred odd pounds can spring, Willard sprang up on a rare Hepplewhite chair. !\*!\* The rest is silence...

Don't wait until everybody's patience is exhausted with those old style rollers (the jumpy, squawky kind) in your school. Any good department, house-furnishing or window

> shade store will estimate on the new Columbia Rollers—the kind with 30% to 40% reserve power—nickel plated ends—RUST-PROOF—self-lubricating bearings that are QUIET.





Baltimore Boston Chicago Cincinnati Cleveland Dallas Detre Fresno Kansas City Los Angeles Minneapolis New Orleans Philadelphia Pittsburgh Portland (Ore.) St. Louis Salt Lake City San Francisco Seattle

Columbia WINDOW SHADES and ROLLERS



### Dust-Mud-Dirt of some kind is always being tracked in

Heedless children! Trudging along-walking in the biggest puddles - splashing mud gleefully - or kicking up dust in great clouds. Into the schoolrooms they come, bringing a large part of the dirt and mud and dust with them. It takes special vigilance to keep school floors clean. Floors which are only "clean enough" should not be tolerated. They must be kept as clean if not cleaner than those of any other public institution, yet the task is ordinarily a more difficult one.

In the face of such a grave problem, the FINNELL Electric Floor Machine achieves a floor cleanliness which no other methods can hope to equal and maintain. In the corridors, in the classrooms, under the desks, in the gymnasiums, the FINNELL accomplishes its work quickly and efficiently. The FINNELL Electric Floor Machine waxes, polishes, scrubs, removes varnish and does light sanding. Puts floors in better condition than ever-no matter what they are-or what condition they are in.

For every school there is an efficient and economical FINNELL System-eight sizes of scrubber-polishers permit adaptation to any

needs. FINNELL floor maintenance engineers will gladly examine your floors, tell you the best way to care for them, and show you the cheapest and most efficient method. To get this information does not cost you more than a postage stamp. Write us today. Address FINNELL SYSTEM, INC., 2514 East St., Elkhart, Ind. Also 130 Sparks St., Ottawa,

Ontario, Canada. Factories: Elkhart, Ind., Hannibal, Mo., and Ottawa, Ont., Canada. District offices in principal cities.

8 sizesranging in price from \$87.50



### FINNE ELECTRIC FLOOR MACHINE

### Everyone is proud of the schools of today

EUROPE may revere antiquity, but America believes in sanitation, decoration, preservation. Particularly for schools.

L. Sonneborn Sons, Inc., are proud to have played some part in this program. All over America, schools and universities are kept beautified, and sanitary by Sonneborn School Products. The list of institutions using our products reads like a roster of the nation's schools.

Whether your building is new or old, Sonneborn Preservative Products are needed. Go over those described below and determine the ones that fit into your present requirements. We will gladly refer you to schools in your vicinity that use Sonneborn Products, so you can see for yourself the results they give and the dependable way they stand up in service.

### SONNEBORN School Products



### For Concrete Floors LA-PIDOLITH

the original concrete floor hardener

The concrete floors in your halls, basements and toilets should be made wear-proof, dustproof, absorbent-proof. Lapidolith, the original concrete floor hardener, will do this. Floors so treated are free from dust and impervious to water or wear. They are easy to wash and can be kept sanitary.

### LIGNOPHOL

for preserving wood floors

Lignophol will give new life to all wood floors by impregnating them with wood gums and oils that they sorely need. Dry heat and scrubbing take the life out of wood floors. They splinter, warp and check. They rot.

Lignophol makes them able to resist these conditions for years.





### For Walls and Ceilings **CEMCOAT** and **SONOTINT** SCHOOL PAINTS

Cemcoat lasts longer and stays white longer than paint. It is a gloss enamel wall coating that reflects light like tile.

Because of its extreme brightness, it is used mainly in recitation rooms, halls and auditoriums. Made so that it resists constant washing. Don't worry about finger marks or stains. Soap and water takes them off Cemcoat. Can be had in all colors. Sonotint is specially made for classrooms or the library. It is a velvety flat wall coating that reflects light without glare. As easily cleaned

On request, we will gladly tell you the nearest schools where any or all of the above products are in service, affording you the opportunity personally to investigate their worth.

L. Sonneborn Sons, Inc.

114 Fifth Ave., New York

WELCOME

VISIT THE HILLYARD BOOTH NO. 329 PRESENT THIS COUPON AND RECEIVE A SPECIAL CONVENTION SOUVENIR



VISIT THE HILLYARD BOOTH NO. 329 AND INSPECT THE NEW **EQUIPMENT** AND PRODUCTS ON DISPLAY

HILLYARD 329 BOOTH

Hillyard Chemical Co. St. Joseph, Mo.

Please ship immediately by prepaid freight-

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- .... Gal. Cocoanut Soap
- . Gal. Pine-O-Cide
- Gal. Trackless Floor Dressing .... Gal. Premier Wood Filler
- .... Gal. Special Gym Finish
- .... Gal. Liquid Wax
- .... Gal. Cement Floor Paint .... Gal. Hilco Insecticide
- .... Gal. Hi-Ko (Sodium
- Hypochlorite)
- .... Gal. Ster-O-Mint
- .... Gal. Sanitation Drip
- .... Gal. Keramic Tile Bleach
- .... Doz. Cans Porcelain
- . Doz. Cans Pipe Opener
- .... Doz. Blox-Odor Blocks
- .... Doz. Blox-Odor Cakes
- .... Doz. Cans Blox-Odor Crystals
- .... Gal. Boiler Compound .... Cases Paper Towels
- .... Cases Toilet Paper

(BUYER)

(CITY)

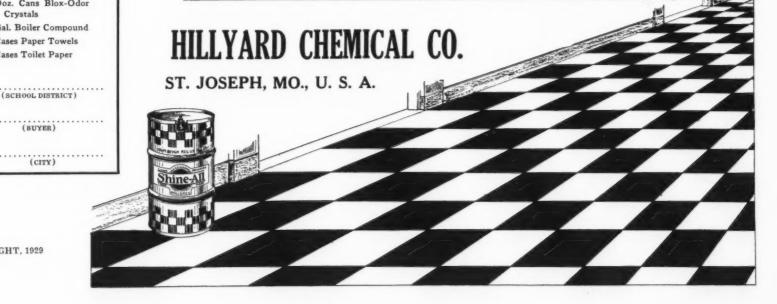
N. E. A. DEPARTMENT OF SUPERINTENDENCE CONVENTION CLEVELAND, OHIO FEB. 23-28

### SEE WHAT YOU WANT THEN USE THIS LIST TO ORDER

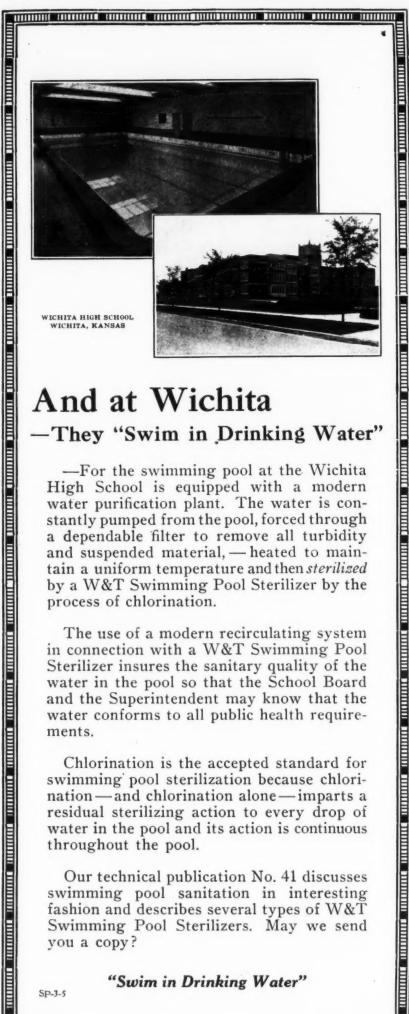
Hillyard's organization of expert school maintenance engineers extends into every part of the country.

The free service of one of these men is at your disposal. Thoroughly trained and with the advantage of a wide experience, each one of these men is in a position to successfully fill every maintenance need that might arise

A request from you will bring an expert to your school and his knowledge, advice and counsel will be yours free of charge and without obligation.



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### And at Wichita

### -They "Swim in Drinking Water"

—For the swimming pool at the Wichita High School is equipped with a modern water purification plant. The water is constantly pumped from the pool, forced through a dependable filter to remove all turbidity and suspended material, - heated to maintain a uniform temperature and then sterilized by a W&T Swimming Pool Sterilizer by the process of chlorination.

The use of a modern recirculating system in connection with a W&T Swimming Pool Sterilizer insures the sanitary quality of the water in the pool so that the School Board and the Superintendent may know that the water conforms to all public health requirements.

Chlorination is the accepted standard for swimming pool sterilization because chlorination—and chlorination alone—imparts a residual sterilizing action to every drop of water in the pool and its action is continuous throughout the pool.

Our technical publication No. 41 discusses swimming pool sanitation in interesting fashion and describes several types of W&T Swimming Pool Sterilizers. May we send you a copy?

"Swim in Drinking Water"

SP-3-5

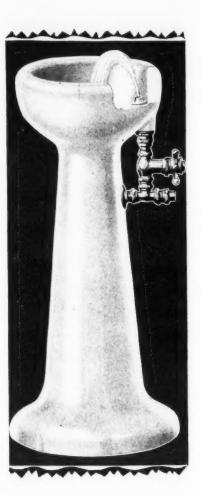


### WALLACE & TIERNAN

COMPANY, INCORPORATED Manufacturers of Chlorine Control Apparatus



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### Satisfy Thirst Sanitarily

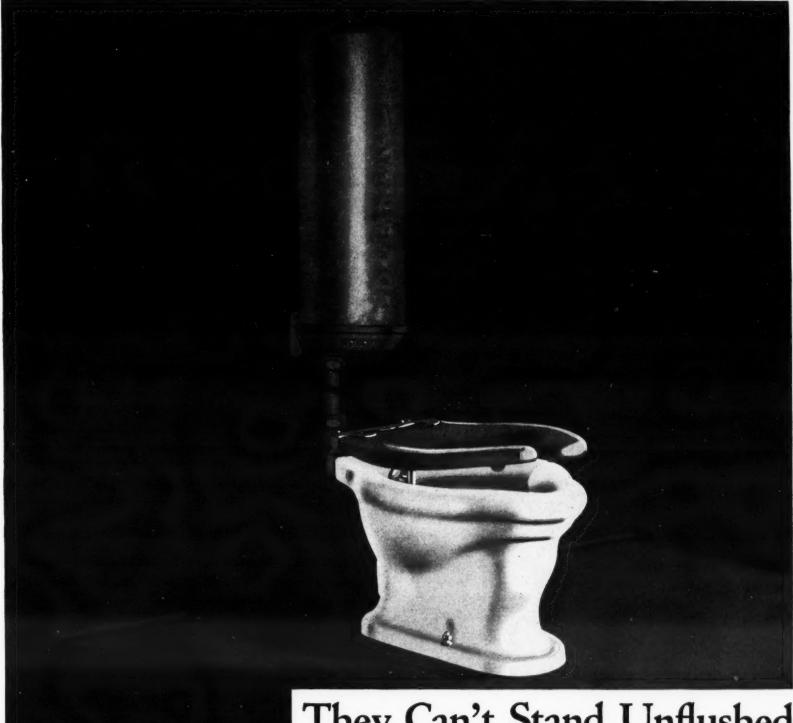
WHEREVER Rundle-Spence drinking fountains are installed, the thirst of all is satisfied sanitarily. It's bound to be because lips cannot touch the R-S nozzle — the slight slant stream prevents water from falling back upon the jet.

Let us give you complete information covering R-S Sanitary Drinking fountains, besides our line of Bath and Plumbing Fixtures and Supplies.

Rundle - Spence Mfg. Co.

51-Fourth Street MILWAUKEE, WIS.





Record No.103

In 1908, 28 Clow Madden Automatics were installed. In 1922, there were no repairs to date (14 yrs.). They were then reinstalled in new school building and are now (1928) still going strong. Location: School, Buffalo Center, Iowa.

They Can't Stand Unflushed Probably for the Next 35 Years

Unflushed closets are filthy, dangerous headquarters for filthy, dangerous insects, smells and germs. Clow Madden Automatics never stand unflushed.

Each time, each time, no matter how many times they are used... Clow Madden Automatics flush themselves. They're automatic. They can't stand unflushed.

Each time, a deluge of water whirls away all waste. Each time, the bowl is purged of taint. And Clow bowls co-operate with water. They have no bumps or hollows to cause eddies.

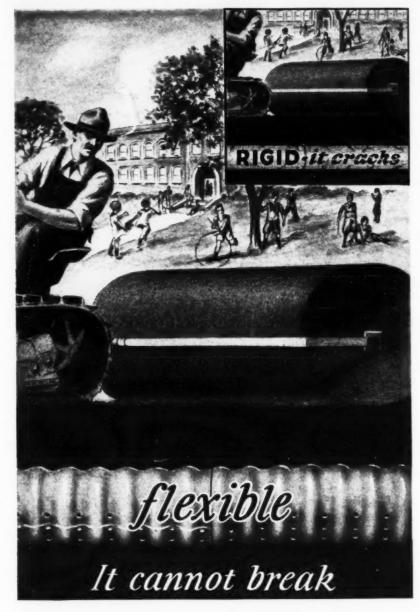
Simple, sure, strong, describe the Clow Madden Valve (it has no by-passes, floats or temperament). It's sensible about water . . . never wastes it . . . never stints it.

Sanitation follows Clow Madden Automatics—through thirty-five years and sometimes more. Water bills become easy to pay. Repair bills seldom happen. (Read Record No. 103.) Send for the Clow School Plumbing Booklet.

James B. Clow & Sons, 201-299 N. Talman Avenue, Chicago

### CLOW MADDEN AUTOMATIC

Forty-Eight Styles, Heights and Types to Meet Your Requirements



### Drains can be Truck and Tractor-Proof

ROLLERS, tractors and heavy ground equipment severely test drains used in school yard and playground service.

Armco perforated pipe is not damaged by impact because it is flexible—it cannot break.



Your name and address will bring complete information.

Armco culverts and drains are manufactured from the Armco Ingot Iron of The American Rolling Mill Company and always bear its brand.

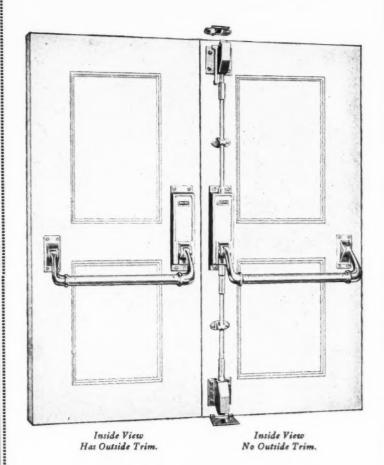
ARMCO CULVERT MANUFACTURERS ASSOCIATION
Middletown, Ohio

ARMCO
perforated
PIPE

### SMITH'S IMPROVED PANIC EXIT LOCKS

NO. 80 LINE

Gravity Panic Exit Bolts



Bolts are operated by a slight pressure on the Cross Bar.

Bolts are not dependent on springs for opening or closing operation.

Simple but sturdy in construction and easily installed.

Will operate perfectly in connection with standard makes of door closers.

Catalogue No. 30 with Supplement "A" sent on request..

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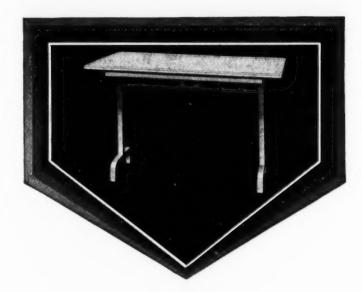


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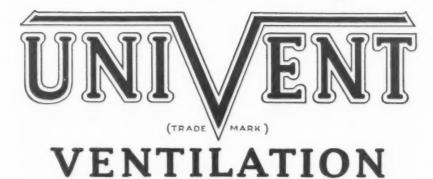
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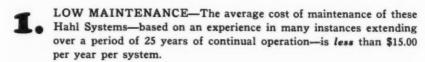
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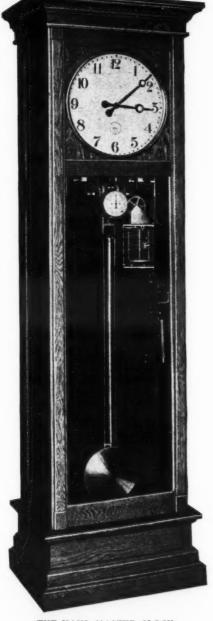




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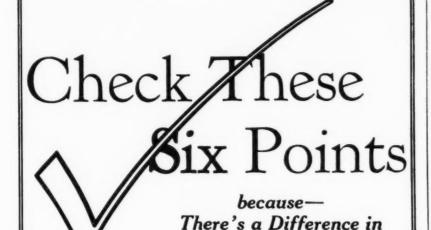


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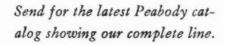
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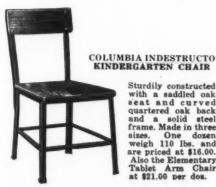
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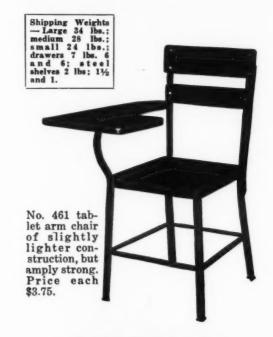


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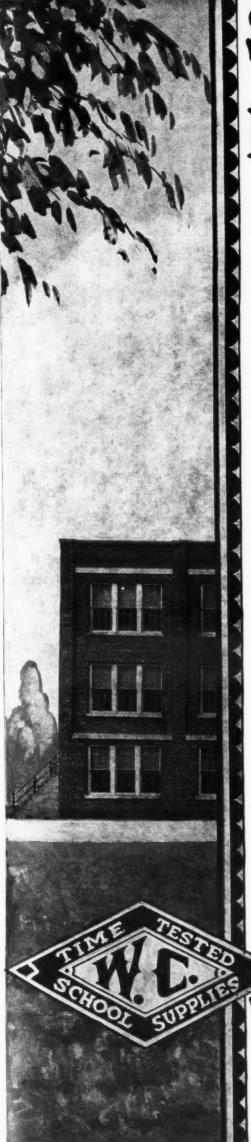
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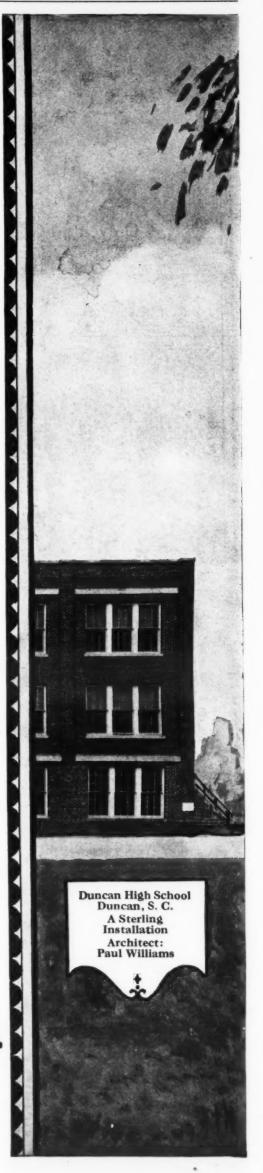
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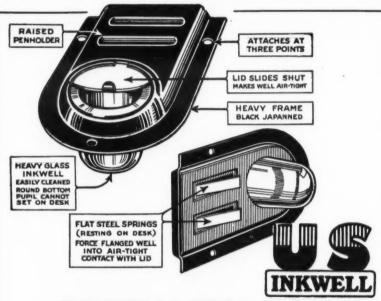
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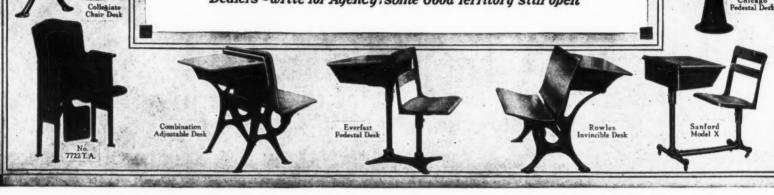
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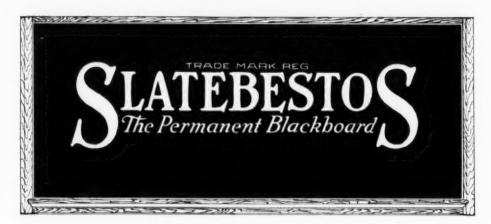
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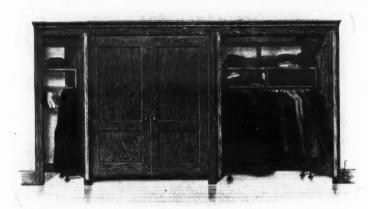
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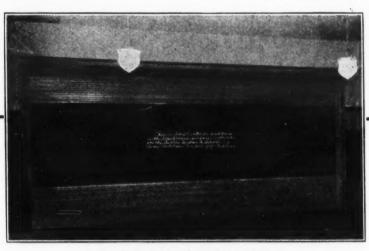
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A Periodical of School Administration

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# The Superintendent Then and Now!

WHEN the School Board Journal was established thirty-eight years ago, it entered upon a condition in school administration in the United States that was radically different from the present situation.

The school board in those days enjoyed a large membership and short terms of service. The members represented wards and districts rather than the community at large. In many instances, they were chosen along partisan lines and were dominated by one or the other of the two political parties. The school-board member enjoyed some prerogatives and perquisites.

And what was the status of the school superintendent? He was in most instances a chief clerk of the board. He advised with the committees on teachers and textbooks, but he did not appoint teachers nor select That was left to the influential members of textbooks. the school board.

There was a warped notion that the member of the board of education must not only determine financial policies but professional policies also. He was certain in his own mind that this teacher should receive appointment as against another. Nothing was simpler. He knew what textbook deserved his vote. He could tell by looking at the book agent.

But, a wonderful change has come about. Today the school board determines financial and administrative policies as it did years ago, but it delegates all the professional responsibilities to the superintendent and his aides. It leaves to these the selection of teachers, textbooks, and course of studies.

The school superintendent has become an executive who guides the professional labors of the school system. No sensible school-board member would ever think of interfering with him. The board of education says "Mr. Superintendent, you are given the widest possible authority on all matters educational. We hold you responsible for results!" Thus, the transition from a clerkship to that of an educational administrator has been brought about within the last three decades.

In noting this transition, it should also be stated that the American School Board Journal became an important forum in which the progressive steps from one to the other were debated. In bibliographies on school administration, covering the past twenty-five years, the American School Board Journal is quoted nearly

as often as other school publications combined.
We take pride in the thought of having made our contribution in bringing the position of the American school superintendent into a more dignified, more useful, and more remunerative status.

WILLIAM GEORGE BRUCE,

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# THE AMERICAN Sthool Board Journal

Founded March, 1891, by WILLIAM GEORGE BRUCE

Volume 78, No. 2

FEBRUARY, 1929

Subscription, \$3 the Year



Superintendent Jones of Cleveland Welcomes the Educators of the Nation

### A Study of School Boards

Walter W. Ludeman, Dean of Education, Southern State Normal School, Springfield, S. Dak.

This study was designed to investigate two phases of boards of education in the smaller towns and cities: First, what type of business and profession is represented upon school boards? Second, where does the division of power and function lie between the board and the superintendent? To get first-hand information on the present status of these two propositions, the writer sent a questionary to several superintendents of South Dakota school systems, from whom he had 64 replies. Out of these answers some very interesting data were received on both the personnel and the function of boards of education.

School-Board Personnel

Nothing is more important in school administration than the selection of the board of education. The progress of the school system and general educational welfare of the developing boy and girl depends to a large degree upon the type of school-board membership, and the attitude which it reflects. Table I shows the professional and business men making up the boards in the 64 South Dakota towns studied.

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Out of over 300 school-board members, 141 men were active business men. This group of individuals is recognized by all authorities as an excellent type of school officer. If the business man is successful in his business, he can bring to the board a fund of experience and judgment in dealing with men and affairs, as well as a knowledge of local conditions which is invaluable for administrative purposes.

Several active farmers appeared on the school boards of the towns and cities studied. This grows out of the law in most states which makes it possible for rural territory adjoining independent districts to be taken in, and when such territory has been attached, representation on the board is usually given the people living in the territory. The very fact that the farming section desires to come into the city district

shows educational progress. Thus the active farmer who represents this rural district makes an excellent type of board member, since he represents a progressive class of people.

Only about one out of every ten of the board members was a woman, as shown by Table I. It has been the writer's experience that this ratio is high enough. A lady board member will be one of two types, either noncommital and modest in her expression of opinion or the opposite extreme. The everyday life of the average woman does not give her experiences which are valuable to a board of education.

Doctors and bankers by the very nature of their business should rate high as board mem-The chief criticism to be made of the doctor is the fact that he never knows when he can be present at a meeting of the board. A banker is usually alert on the trend of the times and is able to advise profitably on matters of

Most superintendents agree in their opinion that former school teachers are better off the board of education than on it. Unless the person is exceptional, a former teacher is inclined to meddle with internal school affairs unnecessarily and friction arise on the board.

There should be no reason why the laborer, the dentist, the station agent should not make good members of school boards. The fact that they are not represented by larger numbers in this study is merely a chance, and certainly does not grow out of any possible objection to them as fit types for membership.

The itinerant nature of the work of such individuals as traveling salesmen, railway conductors, traveling auditors, and others, probably explains the small per cent of them on the school boards studied.

No. Board Members Have Children in School
In the questionary sent out, information was gathered on the number of board members who have children in school. The results showed that in a very large proportion of the towns all five members of the boards had children attending school. Out of the five board members in each town, on the average four members had children in school, according to the returns of the study. It seems that a member of a board of education will display more interest and look to the general upbuilding of a school system to a larger degree, if he has a son or daughter attending the school. The writer has had the experience many times of having school officers

say that the work did not appeal to them any longer after their children were out of school.

# Division of Power Between Board and Superintendent

With a view of discovering the respective powers exercised by boards and superintendents, information was asked for in the questionary on eight major duties. Table II shows a compilation of the results.

TABLE II. POWERS SUPERINTE	OF BOA	RD AN	D
	Super- intendent has sole	Board has sole	Joint
	power	power	power
Repairs on plant	. 2	26	39
Buying of supplies	. 30	3	35
Making out budget		16	35
Recommending teachers		1	53
Selecting textbooks		1-	3
Expelling pupils		7	31
Adopting rules of discipline.		0 :	8
Changing the curriculum		0 .	15

It is interesting to note that, except in problems relating to textbooks, discipline, and curriculum, it is the practice for school boards and superintendents to share responsibilities and powers. Table II indicates that in each of the eight activities listed the majority boards have delegated power of action to the superintendent. It seems natural that nearly one half of the boards should reserve to themselves the duty of overseeing school-building repairs, since this work falls into the everyday experience of many board members. It seems natural, too, that many boards are too content to act jointly with the superintendent in those duties which are more specifically professional or technical. The foregoing does not mean that the school boards have entirely delegated to the superintendents the functions discussed. The custom of requiring full reports for acceptance by the boards continues.

School boards will have very little to do with textbooks, but are inclined to insist upon making the budget, failing many times to even consider the wishes of their superintendent in the matter (Table II). The members of the boards do not care to meddle with problems of discipline and almost refuse to expel pupils, leaving these more disagreeable tasks in the hands of the superintendent.

The study would seem to indicate that in the smaller cities there is a strong tendency for the superintendent to work in close relationship with the board of education on all matters which affect the welfare of the school, with very few exceptions. This policy is recognized as sound from an administrative standpoint and brings much more harmonious relationship both within the school and in the community, where the people have had a voice in the election of the board members and like to be truly represented by their representatives.



FROM TALLEST TO SMALLEST
Cross section of a typical American school system, one pupil from each grade of the public schools of Brookfield, Mo. The little 45-pound tot at the right end of the right end is in the senior class of the high school.

# The Duties of Public-School Administrators

#### I. Introduction

In the series of articles which is to follow, it is proposed to make a comprehensive analysis of the duties of public-school administrators. The field of public-school administration includes the duties assumed and the services rendered by all school officers in charge of public education. The best known of these administrative officers are city school superintendents, high-school principals, and elementary-school principals. This group of administrative school officers constitutes the chief field of publicschool administration from the point of view of vocational opportunity; and because of the more or less standardized duties associated with the principalship and superintendency, it also provides the best field for vocational analysis. these reasons the analysis to follow will be limited to the principalship and the superintendency. The general trend of this analysis will be based upon a group of extensive administrative duty studies which have been made or directed by the author during the past five

It will be the major purpose of the author to make an impartial presentation of the large array of data which have been assembled and which bear upon the duties of public-school administrators. An attempt will be made at the same time, without confusing or covering up the scientific aspects of the vocational analysis, to present briefly the general background of the several minor fields of publicschool administration, and to make such practical interpretations as seem justified by our present knowledge of administrative problems and practices. Before taking up the more detailed treatment of the various duties of school administrators, the following introductory points will be treated briefly: (1) the primary objectives attached to the vocational analysis of administrative duties; (2) the general method and scope of the present investigation; and (3) the distribution of the school administrators included in the present study.

#### The Objectives of Vocational Analysis

The objectives of vocational analysis are simple and, for the most part, direct. The common vocations of life are made up of a series of duties the greater part of which are performed according to definite and known patterns, or are subject to definite and known principles of action. Numerous attempts have been made to analyze vocations on the basis of the duties actually performed. Vocational analysis is the outgrowth of two related and more or less concurrent movements in the scientific development of modern education. The first of these movements is the widespread attempt to reconstruct the curriculum largely on the basis of social analysis. The second movement is the related attempt to organize vocational guidance, including selection, training, and placement, upon the basis of general job analysis. These two movements have led naturally into elaborate and systematic attempts to locate and evaluate the unit functional duties which go to make up certain vocations. In order properly to train a worker, it is essential to know the duties which he will perform. The special objectives associated with the present analysis of the duties of school administrators are as follows:

1. To ascertain the various unit-duties which are actually performed by representative school administrators. A basic list of the duties which are actually performed in a given calling is essential to intelligent administrative planning.

Editor's Note: This paper is the first article of an impor-tant series which will discuss the duties of public-school administrators from the standpoint of presentday practice in a large number of communities. School-board members as well as superintendents will find in the series a most practical analysis of their relations and functions—The Editor.

The more complex the calling, the more useful is a basic list of unit-duties. It is apparent that many public-school administrators give little forethought to the selection of the particular administrative duties which they perform in person. The difficulty with which the present list of duties of school administrators has been obtained reflects something of the uncertainty which must characterize vocational planning on the part of public-school administrators. It is not necessarily wise for a superintendent to perform certain duties simply because other administrators perform them, but it is certainly unwise for him to overlook or to be ignorant of their possible values.

2. To set up a practical curriculum for training school administrators. It seems obvious that vocational training should be closely related to the actual duties which workers are called upon to perform. Whatever theory may prevail with reference to the scope and methods of preliminary training, it is necessary to take into thoughtful account the definite activities which ultimately must be performed. It may, of course, be desirable to modify or eliminate many of the duties now being performed by the average school administrator. Ideal training involves needed modifications of presentday practices. Such changes may best be made upon the basis of a systematic preliminary analysis.

3. To prepare a duty checking list which will

As a basis for planning and scheduling an administrative program. Any adequate plan for conducting a school program must be based upon the specific administrative duties which need to be performed. Failure to grasp comprehensively the essential duties which properly enter into the annual round of administrative activity is a leading cause of the ineffective efforts which now characterize the work of many principals and superintendents.

b) As a basis for the assignment of administrative duties to subordinate staff officers. The assignment of duties upon a functional basis is a well-recognized principle of school administration. Indefiniteness in the assignment of duties and the overlapping of authority results in friction and the dodging of responsibility. The proper assignment of duties is greatly facilitated by the availability of a discriminating list of the unit duties which comprise the field of public-school administration.

c) As an instrument for surveying administrative programs. A systematic check of the administrative duties actually being performed in a given school system provides an exceptionally effective method of approach in surveying the work of local school officers. standard checking list is almost an essential to expert checking. It detects at once the activities which are receiving attention, locates errors of omission, promotes qualitative checking, and provides a concrete basis for constructive criticism and future planning.

#### The General Method and Scope of the Present Investigation

The first attempt on the part of the author to prepare a comprehensive list of administrative duties was made in connection with his university summer classes in public-school admin-

istration. Members of these classes who were practicing principals or superintendents were frequently asked to prepare term papers in which they classified and scheduled their major duties for the coming year. In this manner a classified list of general administrative duties of a practical character was gradually assembled. The scope and detail of this list were gradually increased by this method until 1925, at which time the author undertook to prepare a basic list of administrative duties for the Commonwealth Fund Teacher-Training Study in charge of Professor W. W. Charters. This study was based primarily upon a composite list of some 29,000 overlapping and frequently repeated duties which had been suggested in an offhand fashion by 762 principals and superintendents in various parts of the United States. To this list of duties were added others taken from the reports of six minor investigations of administrative duties which had already been made at this time. This large list was eventually reduced by the elimination of duplicate, minor, and irrelevant duties to a basic list of 759 unit duties. This list, known as the Analytical List of Duties of Administrative Officers, was financed by and turned over to the Commonwealth Fund Teacher-Training Study.

> The foregoing Analytical List of Duties was subsequently checked as to the frequency of annual performance and the comparative value of the various duties by 50 high-school principals and 140 superintendents in the states of Oregon and Washington. Upon the basis of this experience, combined with a systematic study of the duties of school administrators mentioned in the literature of school administration and a personal canvass of the administrative work of 40 superintendents of schools, the preliminary list of 759 duties was entirely reorganized and a new list prepared. This list was printed by the University of Texas under the title, A Checking List of One Thousand Duties of School Administrators. The new Checking List of One Thousand Duties was then submitted to a large number of administrators in various parts of the United States for systematic checking as to frequency of performance between June, 1926, and June, 1927. Usable lists were returned from 473 principals and superintendents. A considerable majority of these returns was secured through the cooperation of university instructors of school administration in various sections of the country, who arranged to have many of the experienced principals and superintendents who were attending their summer school classes fill out the checking lists. The names of these cooperators follow: Carter Alexander, C. J. Anderson, E. W. Anderson, C. C. Chadsey, F. E. Clerk, E. P. Cubberley, Fred Engelhardt, W. F. Ewing, W. S. Ford, C. V. Good, J. H. Jessup, R. H. Jordon, J. C. Miller, E. T. Peterson, W. T. Reeder, C. M. Reinoehl, H. L. Smith, R. P. Stoops, H. B. Wilson, and F. C. Wooton.

In addition to the returns indicated above, the author has interviewed in person 40 principals and superintendents, going over the Checking List of One Thousand Duties, item by item, in order to determine specifically the manner in which the meanings of the various items were interpreted by the administrators, and to check upon the general accuracy of the data which came in when the blanks were filled in independently. By this device and through the general experience of working with the checking lists over a period of years, the various shortcomings and chances for error in the method of inquiry used have become fairly clear, and are taken into account in the interpretation of results. A very considerable number of the returns showed internal evidence of inaccuracies and were thrown out. One special device used for checking the reliability of the returns was the duplication of five of the unit duties at scattered places in the checking list.

The 473 Checking Lists of One Thousand Duties, which were finally accepted as satisfactory, were classified and the data cross tabulated (1) according to type of position (superintendent, high-school principal, elementary-school principal, and general principal), (2) the size of enrollment (1-250, 251-750, 751-2,000, and 2,001 up), and (3) the amount of scheduled hours of teaching per week on the part of the administrator (0, 1-10, 11-20, and 21 up). The amount of detailed work in connection with computing numbers, frequencies, percentages, and other calculations during the several studies has been enormous. In this work, in addition to a paid clerical staff, the author has received notable assistance from many graduate students, and particularly generous and valuable aid from the following: Arthur Taylor, Walter Redford, Hob Gray, H. B. Jones, and G. C. Kenyon.

The Distribution of the School Administration
The territorial distribution of the total 663
public-school administrators included in the
two major studies of the present investigation
covers the entire United States, including 41 of
the 48 states. The number of school administrators from each state follows:

ALTONIO TIONI CHOTI COL			
Alabama	1	Nebraska	10
Arizona	4	Nevada	1
Arkansas	23	New Jersey	2
California	15	New Mexico	5
Colorado	6	New York	12
Delaware	1	North Carolina	1
Florida	1	North Dakota	10
Georgia	3	Ohio	26
Idaho	2	Oklahoma	4
Illinois	22	Oregon	107
Indiana	44	Pennsylvania	8
Iowa	20	Rhode Island	1
Kansas	26	South Dakota	17
Kentucky	2	Tennessee	3
Maine	1	Texas	78
Maryland	2	Utah	1
Michigan	16	Washington	115
Minnesota	32	West Virginia	8
Mississippi	2	Wisconsin	
Missouri	7	Wyoming	5
Montana	4	Total	
3101100110	_	Total	

The distribution of the 663 administrators, according to type of position and size of school enrollment, is displayed in Table I. Here it may be seen that approximately two thirds (418) of the entire group are superintendents. Of these, 134 superintendents were in charge of school systems enrolling less than 251 pupils; 157 were in charge of systems enrolling from 251 to 750 pupils; 94 were in systems enrolling from 751 to 2,000 pupils; and 33 were in sys-

ministrators according to type of position and size of weekly teaching load.

The 190 administrators of the preliminary Oregon-Washington study are omitted from Table II as they were not tabulated according to the size of teaching load. The first column the present inquiry throw considerable light upon these problems, particularly with reference to the specific duties which enter into the work of principals and superintendents and the groups of annual duties which are ordinarily undertaken by these officers.

TABLE II. DISTRIBUTION OF SCHOOL ADMINISTRATORS ACCORDING TO TYPE OF POSITION AND SIZE OF WEEKLY TEACHING LOAD

		Weekly Hours of Teaching								
		0	1	-10	11	1-20	21	up	Total	1
Type of Position		Per		Per		Per		Per		Per
	Number	Cent	Number	Cent	Number	Cent	Number	Cent	Number	Cent
Superintendents	80	29	115	41	68	25	15	5	278	100
High-School Principals	21	24	22	26	32	37	11	13	86	100
Elementary-School Principals	10	23	8	19	9	21	16	37	43	100
General Principals	.5	8	20	30	26	39	15	23	66	100
		-	sub-result.	-		derman	-	-	-	-
Totals	116	25	165	35	135	28	57	12	473	100

of Table II shows the relative numbers and percentages of the various administrators who do no regular teaching. The number of administrators who do not teach is small. Only 80 out of the 278 superintendents, or 29 per cent, did not teach. The principals are free from teaching even less than the superintendent. Twentyfour per cent of the high-school principals, 22 per cent of the elementary principals, and 8 per cent of the general principals, did not teach. Taking the group of administrators as a whole, one fourth (25 per cent) did not teach. In contrast to the 29 per cent who did no teaching, 41 per cent of the superintendents taught from 1 to 10 hours a week regularly; 25 per cent taught from 11 to 20 hours; and 5 per cent taught 21 or more hours. All of the groups of principals show higher percentages in the heavier teaching loads than do the superintendents. The high-school principals total 50 per cent (37 and 13) at more than 10 hours per week teaching; the elementary principals total 58 per cent (21 and 37) at more than 10 hours; and the general principals total 62 per cent (39 and 23). Evidently, a considerable amount of regular teaching must be regarded as a standard school duty for the great majority of public-school administrators.

With the foregoing general introduction in mind, let us now turn to a more specific discussion of the duties of public-school administrators as disclosed by the results of the present investigation. In doing this, the trend of the analysis and explanation will follow the general plan of the classification of duties given in the Checking List of One Thousand Duties of School Administrators upon which the chief part of the investigation is based.

#### II. The General Distribution and Allocation of Administrative Duties

One of the primary problems of public-school administration pertains to the appropriate distribution of duties among school officers. Insofar as school administrators are concerned, this problem takes on two aspects. First is the problem of determining what administrative duties

One of the important matters which came to light in the analysis of the work of public-school administrators is the relative numerical distribution of duties into the several major phases of school administration, such as general control, business management, instruction, etc. The 1,000 duties of administrators may be grouped into nine major divisions, each division representing a leading phase of administrative service. Naturally, a considerable number of administrative duties fit at times into different types of administrative service, but on the whole they fall fairly clearly under the definite types of service indicated below. The titles of the nine major divisions of administrative duties, together with the respective number of duties which fall in each division follow:

I.	General Control	101	duties
II.	Executive Management	169	duties
III.	Business Management	153	duties
IV.	The Teaching Staff	86	duties
V.	The Pupils	120	duties
VI.	The Curriculum	70	duties
VII.	Special Activities	79	duties
VIII.	Instruction	106	duties
IX.	Special Services		duties
	Total	1,000	duties

The general nature of the duties included in each of the nine divisions is indicated by the respective title. A brief description of each division will be sufficient for present purposes. The first division, General Control, includes duties pertaining to executive cooperation with the board of education, survey and publicity activities, contacts with cooperative educational agencies, and items which deal with general educational organization. The second division, Executive Management, includes the various executive duties which are performed in connection with office management and routine, relations with parents and the community, and the administrator's own professional status. The third division, Business Management, includes the duties associated with financial accounting and management, and the care, operation, and expansion of the school plant. The fourth division, The Teaching Staff, includes the administrative duties which pertain to the personal welfare, employment, and professional improvement of teachers. The fifth division, The Pupils, embraces duties which relate to the census, attendance, classification, reports, records, progress, and discipline of pupils. The sixth division, The Curriculum, relates to educational aims, textbooks, schedule management, curriculum revision, and school extension. The seventh division, Special Activities, includes duties pertaining to the management of student organizations, athletic activities, school publications, assemblies, and graduation programs. The eighth division, Instruction, includes teaching, testing, and supervisory duties. The ninth division, Special Services, includes duties pertaining to the supervision of the playground, lunch period, health service, library service, guidance, and transportation of pupils.

The outstanding feature of the divisional distribution of administrative duties as assembled

TABLE I. DISTRIBUTION OF 663 SCHOOL ADMINISTRATORS ACCORDING TO TYPE OF POSITION AND NUMBER OF PUPIL ENROLLMENTS

		Scho	ool Enrollmen	t	
Type of Position Superintendents	1-250 134	251-750 157	751-2,000 94	2,010 up	Total 418 136
High-School Principals Elementary-School Principals General Principals	58 19 24	51 20 38	2 3	2	43 66
Totals	235	266	118	44	663

tems enrolling over 2,001 pupils. The distribution of the various types of school principals—high, elementary, and general—is exhibited in a similar manner in Table I. In every case the enrollments refer to pupils under their immediate charge. The unusual title "General Principal" is used to indicate a principal who is in charge of both high-school and elementary-school grades. The majority of these indicated their title as "Supervising Principal." Of the entire group of 663 administrators, three fourths (501) were in charge of schools enrolling less than 751 pupils. Practically one half of these (235) were in schools with 250 or fewer pupils. Table II discloses the distribution of 473 ad-

shall be attempted. What relative amounts of time, for example, shall the administrative staff devote to supervisory duties, to office management, to contacts with pupils, to the curriculum, to teaching, to buildings, etc.? Having decided to give one third of the time, say, to supervision, what particular duties attached to visiting classes, holding conferences, giving demonstration lessons, suggesting improved devices, etc., shall be undertaken?

Second, is the problem of allocating duties to the different administrative officers. What particular duties shall be assumed by the superintendent? By the high-school principal? By the elementary-school principal? The results of

in the checking list is the comparatively large number of duties (169) which fall in the field of executive management. On the whole, however, the 1,000 duties are fairly well distributed over the entire field of school administration, each division containing an important array of duties. The large number of duties (120) connected with the administrative care of pupils may be a matter of surprise to some, and it is undoubtedly astonishing to others to note the number of administrative duties now associated with special activities (79) and special services (116). It is evident that these comparatively new types of administrative services may occasion a very considerable amount of administrative supervision.

In discussing the foregoing alignment of administrative duties, we have considered in every case the total number of duties listed under each general heading. The question of how many of the total 1,000 duties any one principal or any one superintendent may elect to perform during the course of a school year, is quite another matter. Quite naturally, no one administrator performs the entire 1,000 duties listed. As a matter of fact, judged on the basis of the performance of 473 administrators, the average administrator in this respect annually performs 433 of the 1,000 possible duties. The average numbers and percentages of total duties actually performed in each of the nine major divisions are tabulated in Table III and exhibited graphically in Figure I.

The data exhibited in Table III and graphically portrayed in Figure 1 show that publicschool administrators as a group perform their duties on a fairly even numerical basis throughout the various phases of the administrative program. The two outstanding exceptions to this statement are in the fields of executive management and special services. In the field of executive management the average performance of 85 duties involves twice as many duties as the average of the remaining fields, while in the field of the curriculum the performance of 30 duties is considerably more restricted than the average performance of the other fields. The field of executive management contains a wider

1	General Control	44-191
11	Executive Management	85-169
III	Businees Management	55-153
IA	The Teach- ing Staff	////// 44-86
V	The Pupils	53-120
VI	The Curriculum	30-70
AII	Special Activities	37-79
AIII	Instruction	47-106
IX	Special Services	38-116

1. COMPARATIVE DIVISIONAL DISTRIBUTION F 1000 ADMINISTRATIVE DUTIES AS PER-FORMED BY 473 PUBLIC-SCHOOL ADMINIS-TRATORS DURING THE YEAR 1926-1927.

The entire horizontal bar represents the possible number of duties. The shaded portion represents the average num-ber of duties actually performed.

array of possible duties (169) in the first place, and it is evident that its characteristic office, community, and self-improvement duties are

TABLE III. THE AVERAGE NUMBERS AND PER-CENTAGES OF ADMINISTRATIVE DUTIES PER-FORMED BY 473 PUBLIC SCHOOL ADMINIS-TRATORS DURING THE YEAR 1926-1927 Administrative Duties

		Aumin	intiative	Per
			Number	Cent
	Division	Number	Per-	Per-
		Listed	formed	formed
I.	General Control	101	44	44
II.	Executive Management.	169	85	50
III.	Business Management	153	55	36
IV.	The Teaching Staff	86	44	51
V.	The Pupils		53	44
VI.	The Curriculum	70	30	43
VII.	Special Activities	79	37	47
VIII.	Instruction	106	47	44
IX.	Special Services	116	38	33
	Total	1000	433	43

more or less common to all groups of administrators. On the other hand, the field of the curriculum includes a total of only 70 possible administrative duties, and it is also evident that they are not so frequently attempted by school

(Continued on Page 137)

Out of the Book of Experience Dr. Wilbur F. Gordy, Hartford, Conn.

The book of experience contains many chapters, a few of which the author will discuss at These cover three years as school this time. superintendent in Ansonia, Connecticut, twenty years as a supervising principal in Hartford, Connecticut, seven in Springfield, Massachusetts, and fifteen years as a member of the Hartford board of education, during the last twelve of which—1915-1927—I was its president.

During the three years that I was superintendent of schools in Ansonia and the twenty years I was supervising principal in Hartford, I never met the school committee as a whole, but came into personal contact in the school administration, with the chairman of the school committee only. But, when I became the superintendent of the Springfield schools, I met the whole school board in its meetings, all of which were executive sessions.

Upon receiving an invitation to go to Springfield to confer with the board members regarding the superintendency, I said to each one of the nine: "I wish to make it clear that the position will not attract me, nor will I accept it if offered me, without the assurance that no principal or teacher will be elected during my term of office, without my approval. I am not seeking power," I added, "but I do wish to be held responsible for all the work of the schools, and therefore wish to share in the responsibility for the appointment and election of teachers.



DR. WILBUR F. GORDY Hartford, Conn.

So I ask for the privilege of nominating them, although I shall not feel at all sensitive if any nominations are rejected by your body."

At the next meeting of the school board, I was unanimously elected. I remained in the position for a term of seven years, and during that time no nomination that I made ever re-

ceived a single adverse vote. Further: during that time not a member of that fine group of men and women in the school board ever requested me to nominate any principal or teacher for the schools of Springfield.

I clearly understood-and I thoroughly approved of the policy—that I was to nominate local teachers for vacancies if they were as good as the applicants who did not live in the city: but I was directed to select the best candidates I could find, in the city or out of the city, because the well-being of the children and of the community demanded such selection. Two results inevitably followed this wise policy of the school board: (1) A remarkably efficient group of teachers, many of whom, even in the lower grades, were college graduates; and (2) schools which rank, as they still do, among the best in the whole country.

The Springfield board of education had learned that the quality of the teaching force determines the quality of the schools. I was happy in my work in that superb school city because politicians had no hand in controlling the educational policy of those who were responsible for school management.

I had this rich experience to guide me in my fifteen years on the Hartford school board. Here again, I found among my coworkers men and women who recognize of first importance the necessity of getting the best teachers for the schools, and that the only way to get such teachers was to trust the school superintendent to select the candidates and recommend their appointment.

The best things I have learned from my administrative experience in educational workas a supervising principal, a superintendent, and as a school-board member-I will state in the next four paragraphs:

The American people depend upon experts in the fields of engineering, law, medicine, and theology. But in education, where expert knowledge and skill are as much needed and are quite as important, they fail to get the advantage they could easily get if they secured the best experts and let them perform the service for which they have been trained.

In taking this lax and unwise course and in permitting politicians in the great majority of towns and cities to dominate the schools by dictating the appointment of teachers, they seriously lower the efficiency of the schools and thus do irreparable harm. This is a great injustice to the children, who are entitled to the best possible training which the community can buy. It is surprising that the American people, in many ways so practical, should allow not only their money to be wasted but their children to be robbed of their right to the best attainable preparation for the duties and responsibilities of adult life.

All intelligent people know, or should know, that costly, well-equipped school buildings and scientific, up-to-date courses of study do not make good schools. Even, if to these there be added, the best attainable superintendents, supervisors and principals, schoolroom results will be barren without the right kind of teachers. It is recognized that more than knowledge, and skill in imparting knowledge, are a requisite in our schools. Men and women who have the capacity for friendship, and who show a deep personal interest in the young lives they must guide and inspire, are needed if the work is to be truly creative. Without the superior personality which the artist-teacher possesses, there cannot be superior teaching.

The selection of teachers is by far the most important task in the management of a school system, and it should be retained in the control of experts who know what good teachers

### The Auction of Buel's Shoes

J. L. Considine, San Francisco, Calif.

Among the devices of the pioneer mining camps of the Far West for amusing themselves, auctions were a favorite. They were often resorted to for raising money for philanthropic purposes, and once at least to assist a publicschool fund. This was when the shoes of Colonel David E. Buel were auctioned off and the sum realized was devoted to the school fund of the town of Austin, Nevada.

This was not the first time that Colonel Buel had figured in connection with an auction. The reader will not find his name in Mark Twain's "Roughing It," but it was a bet made on Buel's being elected mayor of Austin that led to the auctioning of a sack of flour for the benefit of the Sanitary Fund in the Civil War-an incident which forms one of the most interesting chapters in "Roughing It."

Buel was one of the famous characters of California and Nevada successively, in the pioneer days. He was one of those who cannot escape the limelight. Six feet, four inches tall, he had the stature and the strength of a Porthos. He first attracted considerable attention when as sheriff of El Dorado county, California, the county seat of which is Placerville, a town better known in Buel's day as Hangtown, he rescued a man from the hands of the lynchers.

Buel, tired out after a hard day's riding, was at a tavern twelve miles from Placerville when he got the first tidings that the lynchers were going to hang a man that night. He called for a bottle of whisky, broke it off at the neck, poured the contents into a bucket of water and gave it to the weary horse. Then, to spare the jaded animal as much as possible, he refrained from mounting during the first three miles, which were a steep upgrade, but ran along beside the horse with one arm over the creature's neck. At the top of the grade he sprang upon the horse's back, and raced the remaining nine miles into Placerville.

The lynching had been set for eight o'clock, and it was on the stroke of that hour when he and the big horse—a steed proportioned to the size of his rider-came thundering into town. Night had come, but the eerie light of torches showed the way to the scene of the proposed hanging and Buel made straight for it. The victim was already under the tree, the rope dangling about his neck as Buel rode up.

"Hold on," cried the sheriff, sparring for time. He alighted and, followed by the horse, made his way through the mob, knocking men right and left as if they were nine-pins. He liberated the man from the rope, seized and flung him onto the horse as if he were a child, and slapping the animal on the flank, sent it bounding through the throng. Then drawing his revolver he held the crowd while the fugitive made good his escape.

He left Placerville for Nevada, and became a pioneer in mining camp after mining camp. In three at least he made a fortune. The first was in Belmont where he secured possession of a promising mine. He made the long sea voyage to London, where he sold the mine. Before returning home he ran over to France, and to the races at Chantilly. Looking the seats over, he found them all gone with the exception of a section under a very ornamental canopy, and located in the very heart of the grandstand.

As the section was empty, Buel mounted into it and helped himself to a comfortable seat. Officers in military costume rode up and expostulated with him in French, of which Buel understood not a word. They gesticulated wildly and harangued until they were red in the face, but Buel only smiled and responded

that he liked the seat and preferred that they should not put themselves out in showering attentions upon him. Defeated, a minor officer would ride away and summon another and higher one, but the difference in rank meant nothing to Buel. He simply sat there and smiled complacently. The one-sided argument was still on when the Emperor, Napoleon III, the Empress, Eugenie, and a numerous suite rode up in carriages and dismounted to enter the grandstand. The emperor took in the situation at a glance, told the excited officers to let the big American remain, and Buel enjoyed the Chantilly races from the imperial box.

Buel's feet were not only in proportion to his massive frame, but the shoes that covered them were more than comfortably loose. It is not surprising, therefore, that, in the words of a chronicler who lived in Austin and knew Buel well, "They excited surprise and admiration." It was probably without his knowledge or consent that one May evening the shoes were taken from his apartments and auctioned off by Tom Wade for the benefit of the Austin school fund. And although they brought nothing in comparison with the Gridley sack of flour, which ultimately drew more than \$200,000 to the fund for the relief of sick and wounded Union soldiers, the returns (\$113.50) were in keeping with the size of Buel's shoes.

Austin ultimately proved a great mining camp, producing something like \$100,000,000 in gold and silver, but the place was in its infancy comparatively speaking when Buel's shoes came to the rescue of its school fund. A few months later Nevada was admitted to the Union, and the constitution made liberal provision for the support of the schools. The population, which previously had been of a nomadic type, consisting mostly of men who were bent on making a fortune as quickly as possible and getting away again, began to settle down. Women and children came in, and, with the civilizing and refining influences of their presence and the growing stability of the population, schools became numerous and were generously provided

## Federal Control Over State Educational Policies as Revealed by Supreme Court Decisions

John J. Lee, State Inspector of High Schools, Lansing, Mich.

There are two articles in our Federal Constitution which by Supreme Court interpretation relate to public education, and based on their interpretation three very notable cases of interest have been decided. These three are the only cases relating to education which have been carried to the Supreme Court of the United States, except in early cases pertaining to Land Grant Colleges and the sale of the sixteenth section in townships of the Northwest Territory. Thus, through these three decisions Federal control has been defined and established over the educational policies of the states.

The attitude of the Supreme Court has been modified during the last ten years. Previous to 1920 it was entirely one of "noninterference" based on Article X, which reads: "Powers not delegated to the United States nor prohibited by it to the states are reserved to the states."1 By this right, education was and is now essentially a state function. "Nearly every state constitution requires its legislature to provide a school system where all children may receive an education. The provisions of the various state constitutions differ, but they make it the duty of the legislature to provide by law a general and uniform system of common schools where tuition shall be without charge and equally open to all." The legislature has full power to compel local organizations of the state to maintain schools in their respective territories even without the consent of those who will be taxed therefor.<sup>2</sup> In terms of Article X of the Federal Constitution, the states are each free to make full provision for and to exercise complete control over their own educational systems.

#### Complete State Control Modified Under Article XIV

During the last decade the Supreme Court has extended its jurisdiction through Article XIV of the Federal Constitution, which says: "No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."3

<sup>1</sup>Constitution of the United States, Article X. <sup>2</sup>Elementary School Journal, Vol. XXVI, No. 1, Sept., <sup>2</sup>Constitution of the United States, Article XIV.

The first case carried to the Supreme Court was the so-called Oregon school case.4 The Oregon state legislature had enacted a law in 1922 requiring that all children between the ages of eight and sixteen must attend public schools. The Hill Military Academy, a private school, and the Sisters of the Holy Name, a Catholic sisterhood, brought suit to test the validity of this law. The case was carried to the Supreme Court of the United States, and in 1925 a decision was rendered. In its opinion the court expressed these principles: (a) that "the challenged legislation unreasonably interfered with the liberty of parents and guardians to direct the upbringing and education of their children according to the dictates of their own conscience;"4 also (b) that "the private schools were deprived of property without due process of law,"4 because exercise of the law passed by the state would practically mean confiscation of property so far as using it for its original purpose was concerned.

This decision is of particular importance because it defines a limit beyond which the state cannot go. It also establishes the practice and precedent that the Federal Government will protect the citizens of any state against unwise and repressive legislation in relation to education even though it is essentially a function of the state.

#### The Nebraska Language Case

The second Supreme-Court decision was rendered in the case, Nebraska District of Evangelical Synod of Missouri et al. v. McKelvie.5 The State of Nebraska had passed a law which prevented the teaching of any foreign language below the eighth grade in any school. Justice Reynolds in rendering his decision ruled that "such a law was arbitrary and without reasonable relation to any end written in the competency of the state." This decision was based on the principles that (a) "liberty does not denote mere freedom from bodily restraint, but includes as well the right to contract, to engage in any of the common occupations of life, to acquire useful knowledge, to marry, to establish a home and bring up children, to worship God

<sup>&</sup>lt;sup>4</sup>Pierce v. Society of the Holy Name of Jesus and ary, Pierce v. Hill Military Academy. From "Laws Oregon" (1923), p. 9, also 45 Supreme Court Re-Mary, Pierce of Oregon" porter, 571.

<sup>(</sup>Concluded on Page 138)

# The Apportionment of State School Funds V. The Massachusetts Plan'

Fletcher Harper Swift, Professor of Education, University of California, Berkeley, Calif.

Unique features of the Massachusetts plan.— There are many reasons why a study of any aspect of the Massachusetts system of school finance is a matter of wide interest. No other state in the Union pursued so long and so completely the policy of placing almost the entire responsibility for supporting and directing schools upon the local community. The conviction that the state should assume little or no responsibility for school support delayed the provision for a state permanent school fund until 1834 and from the beginning until now legal limits have been established which the principal shall not exceed.

Fully as interesting to the student of school finance is Massachusetts' frank recognition of the error of placing so large a proportion of the burden of school support upon local school units. This recognition was given practical expression in 1919 by a law providing for setting aside a portion of the state income tax (created in 1916) as a current general school fund.

Another unique feature of the Massachusetts plan has been her readiness to experiment with new methods and new bases of apportioning school moneys. Most of our states are content to continue distributing state school funds year after year by unchanging methods. Massachusetts, prior to 1904, had changed her method of apportioning school moneys no less than thirteen times. In 1919, in 1921, and in subsequent years she has made important modifications in her plan of apportioning state moneys.

The quest which no small number of our states is already entered upon lends much interest to Massachusetts' employment of the state income tax as her chief source of state revenues for public schools. As will appear later, Massachusetts has guarded carefully against the establishment of a fixed fund which experience has shown always fails to guarantee that the revenue provided will be adequate to meet the just claims of the local school corporations. Massachusetts, in contrast to the policy pursued of most of our states, instead of providing a fixed fund, specifies the projects for which the state will make grants, and then provides that the moneys required to meet these claims shall be paid from the proceeds of the state income tax on which the schools thus have a prior claim.

From these preliminary considerations, attention may now be turned to the classes of state funds provided by Massachusetts for the benefit of public schools, the sources from which such funds are derived, and the methods in accordance with which they are apportioned.

Classes of state funds.-Massachusetts maintains two state funds for the support of public elementary schools and provides state appropriations from the state ordinary revenue, or the general fund, for specific educational purposes. The two distinct school funds referred to in the preceding sentence are: a permanent state endowment fund created and maintained for the benefit of public schools and officially known as the Massachusetts school fund, and a current fund composed of a portion of the annual proceeds of the state school tax and known officially as the general school fund.

Table I presents an analysis of state aid provided for the public elementary and secondary schools in Massachusetts for the year 1926.

<sup>1</sup>The present article is the fifth in a series of articles on state plans of apportioning school funds contributed to the Journal by Professor Swift. The author wishes to express his indebtedness to A. B. Lord, director of the Division of Statistics, Massachusetts State Department of Education, who read and approved the original manuscript.

Per Centb

Massachusetts school fund.—A permanent state endowment for public schools, the income of which may be used, was created in 1834 by an act for setting aside certain moneys derived from (1) "claims on the national government for military service; (2) proceeds of the sales of state lands in Maine."2

The act of 1834 creating the fund limited its principal to \$1,000,000. Subsequent acts increased the limit until it was fixed, in 1894, at \$5,000,000, which limit continues in force. In view of these facts, it is not surprising that the law makes no provision for any important sources for increasing the principal of this fund.

On November 30, 1926, the principal of the fund consisted of a small cash balance and securities, the total par value of which amounted to \$4,990,950, but the market value of which was reported to be in excess of \$5,000,000.3 The income of the fund for the year 1925-26, amounted to \$214,515.58,4 of which \$210,744.37 was distributed among the towns of the state for the benefit of the schools.5

General school fund-state income tax.-In 1916 Massachusetts passed her income tax law.6 Three years later, namely, 1919, the state provided for setting aside a portion of the proceeds of this tax to constitute a new annual current school fund, officially known as the general school fund. The creation of the general school

<sup>2</sup>For an account of the origin and early growth of this fund, see F. H. Swift, Public Permanent Common School Funds in the United States, pp. 302-307.

<sup>3</sup>Massachusetts Treasurer and Receiver-General, Annual Report, 1926, p. 25.

<sup>4</sup>Massachusetts Commission on Administration and finance, Annual Report, 1926, Part II, p. 63.

<sup>5</sup>Massachusetts Department of Education, Annual Report, 1926, Part I, p. 66.

<sup>6</sup>Laws of Massachusetts, 1916, ch. 269.

fund was the direct outgrowth of the recommendation of the Special Commission of Education appointed by the Governor under the authority of chapter 88 of the Resolves of 1918. The commission prepared two bills. The General Court, in 1919, combined these two bills into a single law.7

This act, characterized as "the most important educational bill that has been before the legislature in twenty years," is divided into two parts. Part I, consisting of sections 1-7, provides for the creation and disbursement of the general school fund. Part II, consisting of sections 8-17, provides for the perpetuation of the Massachusetts school fund and a new method of disbursing its income, together with sufficient additional moneys from the proceeds of the state income tax (not to exceed \$250,000 annually) as may be necessary to pay in full the claims against the income of the Massachusetts school fund.

This act constitutes chapter 70 of the General Laws. Certain sections of the act were amended in 1921 and subsequent years, including 1926.

The general school fund is not a fixed amount, but rather a sum to be set aside annually from the proceeds of the income tax, sufficient to provide for the purposes set forth in Part I of the act, and which shall be available without further legislative action.8

The total proceeds of the state income tax, in 1926, amounted to \$21,193,106.05.9 Twentytwo and six-tenths of this total, namely, \$4,833,080.34, was devoted to the general school fund.10 No portion of the proceeds were required to supplement the income of the Massachusetts school fund.11

Any portion of the proceeds of the state income tax not required to meet the state's obligations to schools, is returned to the cities and towns in proportion to the amount of the state general property tax imposed upon each.12

<sup>7</sup>Massachusetts General Acts, 1919, ch. 363.

<sup>8</sup>Massachusetts General School Laws, Relating to Education, 1927, p. 11, ch. 70, sec. 1.

<sup>9</sup>Commissioner of Corporations and Taxation, Annual Report, 1926, p. 74.

<sup>10</sup>Massachusetts Department of Education, Annual Report, 1926 Part I, p. 66.

<sup>11</sup>Ibid.

<sup>12</sup>Massachusetts Acts and Resolves, 1922, ch. 54.

TAB	LE II. MASSACHUSETTS STATE SCHOOL APPROI OR REVENUE, 1926, EXPENDI			ERAL FUND
		Appropriation <sup>b</sup>	Expenditure	Balance
I.	For State Department of Education		•	
	Salaries and Personal Services	\$ 94,000.00	\$ 93,671.80	\$ 328.20
	Travel	9,528.81	7,752.64	1,776.17
	Incidentals	15,647.78	14,670.10	977.68
	School registers and blanks	3,799.88	2.535.06	1,264.82
	Sight and hearing tests	800.00	139.47	600.53
11.	Local Administration and Supervision			
	Superintendency unions	105,788.67	103,389.06	2,399.61
III.	Vocational Education			
	Independent industrial schools	1,260,669.07	1.260,659.31	9.76
	Teachers of vocational education	29,816.19	53,330.09	2,924.42
IV.	Tuition and Transportation of High School Pupils			
	Tuition	186,773.39	184,048.52	2,724.87
	Transportation	166,047.56	164,923.37	1,124.19
	Wards of the state	165,000.00°	165,000.004	
	Paroled juveniles	4,000.00°		
V.		14,000.00	14,000,00	
VI.				
	Teachers' retirement board	* * *** * * * *		
	Personal services and contingent expenses	10.800.00	10,790.51	9.49
	Teachers' pension reimbursement to cities and towns	108,783.01	108,783.01	
	Pensions to teachers	411,000.00	409.219.60	1,780,40
	Total	\$2,586,454,36	\$2,502,912.54	\$15,980.44

"Unless otherwise indicated, all data in present Table are taken from Massachusetts Department of Education, Annual Report, 1926, Part I, pp. 49 and 50. The present account is concerned solely with appropriations which contribute to the support of public schools. For this reason, the following appropriations are not included in the present account; appropriations for normal schools, teachers' institutes, vocational rehabilitation, division of university extension, English-speaking classes for adults, division of Immigration and Americanization, division of public libraries, division of the blind (except for public-school sight-saving classes), Massachusetts Nautical School, state textile schools. Appropriations payable from the general school fund are also excluded from this Table, the purpose of which is to show appropriations from the state general fund.

whereas the general school fund is derived from the proceeds of the state income tax and from the income of the Massachusetts school fund.

Amounts reported include balances from previous year. For detailed statement of these balances, see Massachusetts Department of Education, Annual Report, 1926, pp. 49 and 50.

cMassachusetts Acts and Resolves, 1926, ch. 79, items 508 and 518. These appropriations are made to the division of child guardianship and the division of juvenile training of the department of public welfare, consequently they do not appear in the appropriations reported in the Massachusetts Department of Education, Annual Report.

It is not clear that this entire amount was expended.

In 1921 no less than 64 per cent was thus returned, and in 1926 no less than 77.4 per cent. The proceeds received by the cities and towns are paid into the general treasury of each, with the result that a considerable proportion of the proceeds thus returned, eventually reaches the public schools through appropriations from city and town treasury.<sup>13</sup>

Apportionment of State School Funds14

The manner of apportioning the general school fund is provided for in Part I of chapter 70 of the General Laws of Massachusetts, and the manner of apportioning the Massachusetts school fund in Part II of the same chapter. It is necessary to keep in mind this division of chapter 70 into Part I and Part II, as the law itself refers in a collective way to the provisions contained in Part I and Part II. Moreover, the general school fund is not a fixed amount, but as we have seen, a sum set aside annually from the proceeds of the state income tax sufficient to provide for the purposes and to pay the reimbursements set forth in Part I of chapter 70, and which becomes available without further legislative action.

further legislative action.

General school fund.—The general school fund is distributed annually on or before November 20 among all the towns and cities of the commonwealth in the form of reimbursements for moneys expended during the year ending on the preceding June 30, in paying the salaries of superintendents, assistant superintendents, principals, supervisors, and teachers. The quotas of the fund are paid out by the state treasurer in two installments. From the first installment are paid what, for convenience, we may call ordinary reimbursements; and from the second installment what we may call supple-

mentary reimbursements.

Ordinary reimbursements.—Ordinary reimbursements are paid in the form of definite quotas for each teacher or other school officer employed. The amount of the reimbursements paid for each such school officer is determined first, upon the basis of whether he was employed for full time or part time, and second, upon the basis of his training; third, upon his years of previous experience, and fourth, upon the salary received from the town or city. In general, it is the purpose of this fund to provide a salary reimbursement for every teaching, supervisory, and administrative position maintained in connection with the public schools. However, a limited number of positions are excluded from reimbursements from the general school fund but not from state aid, as they are reimbursed from state special appropriations. No town in a superintendency union shall receive a reimbursement for the part-time employment of a union superintendent if entitled to reimbursement therefor under section 65 of chapter 71 of the General Laws. In like manner no town is entitled to reimbursement from the general school fund for salaries paid to teachers in state aided vocational schools or departments, continuation schools, or Americanization classes for which the town receives state reimbursements from other funds.

The salary reimbursements paid are the same whether the reimbursement be for a superintendent, a principal, a supervisor, or a teacher, provided the already mentioned factors of training, experience, and salary paid by the town are the same.

Table III which follows shows the method of distributing ordinary reimbursements, the objects for which the same are granted, and the amounts.

Supplementary reimbursements.-It will be

TABLE III. METHOD OF APPORTIONING ORDINARY REIMBURSEMENTS FROM GENERAL SCHOOL
FUNDa

(Salary reimbursements to every town and city regardless of valuation)
I. For Each Full-Time Superintendent, Assistant Superintendent, Principal, Supervisor and Teacher

			will dill city regulated or interest,
I.	For Each Full-Time Su	perintendent, Assistant Minimum Salary	Superintendent, Principal, Supervisor and Teacher Minimum Qualifications of Such School Officers
	Amount of P	reviously Paid to School	Yrs. of Teach-
Class		fficer by Town or City	Professional Preparation ing Experience
A	\$200.00		Graduate of an approved normal school
28	\$200.00	\$550.00	or college
B	200.00°	959.00	b b
C	150.00°	850.00	Satisfactory completion of one year of professional training in an approved
n	150.00°	850.00	normal school or teachers' training school or two years in college 3 Graduate of an approved normal school
1,	130.00		or college
E	150.00°	850.00	ь
F.	100.00°	750.00	All officials not covered in the above classifications
	II. Salary Reimburse		me School Officer Belonging to Classes A-Fd
the		he Town or city mu on an amount not le or tion of the corr	ist have expended Qualifications must correspond to ss than that frac- tesponding salary in classes A-F.

<sup>a</sup>Compiled from *Massachusetts General Laws Relating to Education*, 1927, ch. 70, Part I, secs. 1-3.
<sup>b</sup>"Or whose preparation and teaching experience are accepted as equivalent to those of the preceding group."
<sup>c</sup>For every such school officer not included in any previously provided for class.

<sup>a</sup>No town in a superintendency union shall receive a reimbursement for the part-time employment of a superintendent if entitled to reimbursement therefor under section 65 of chapter 71, Massachusetts General Laws Relating to Education, 1927.

evident from the description of supplementary reimbursements and the bases employed in apportioning the same, that the proportion of the general school fund devoted to such supplementary reimbursements is designed to fulfill the function of an equalization fund. Such reimbursements are apportioned on the basis of the amount of state property tax paid by towns per pupil in net average membership. For this reason it is necessary to consider, at least briefly, the state general property tax.

The state levies annually on its constituent cities and towns a general property tax sufficient to cover all costs included in the approved state budget which cannot be met from the aggregate of all other state revenues. The amount to be thus provided, is apportioned among the cities and towns of the state on a basis of their re-

spective assessed valuations.

Supplementary reimbursements are limited to those town in which the proportionate amount paid of every million dollars of state tax as established by the last preceding valuation made for the purpose of apportioning such tax, when divided by the net average membership<sup>15</sup> of its public day schools, for the year ending on the next preceding June 30, yields a quotient of less than 95 cents. Towns in which said quotient is less than 95 cents are further divided into six classes and are reimbursed for each school official whom the town is entitled to receive an ordinary reimbursement, according to the following schedule.

Massachusetts school fund.—The income of the Massachusetts school fund is apportioned annually on December 31 and paid to the towns on the following March 10. The quota granted to any town is determined on the basis of the following factors: (1) the town's valuation as determined by the last preceding valuation made for the purpose of apportioning the state general property tax; (2) the town's "assured minimum" which may be defined briefly at this point as the excess of the town's expenditures for certain school costs over the amount received by the town during said year from the general school fund and for tuition of nonresident pupils, including state wards. In computing the "assured minimum," expenditures for state-aided vocational or continuation schools or Americanization classes are not included, but the following expenditures are those to be added when determining the excess just referred to:

- 1. Salaries paid to full-time principals and teachers, any one such salary not to exceed \$1,100
- 2. The sum of \$250 for each position held by a full-time principal or teacher.
- Pupil transportation cost to local schools.
   Costs of tuition and transportation of
- pupils to public elementary schools in adjoining towns.
- 5. Actual costs for high school tuition of pupils attending high schools outside the town of their residence, in the case of towns having over 500 families and exempted from maintaining a four-year high school.

As would appear from the immediately following paragraphs, the reimbursements paid from the income of the Massachusetts school fund are based upon fractional amounts of the town's "assured minimum" in relation to the local tax rate required to pay the town's proportion of the state general property tax.

With this preliminary explanation, the method of determining and apportioning reimbursements payable from the income of the Massachusetts school fund, may now be presented as stated in sections 12, 13, 14, and 14° of chapter 70 of the General Laws, which set

forth the plan in details.

Section 12. "A town in which the proportionate amount paid by such town of every thousand dollars of state tax as established by the last preceding valuation made for the purpose of apportioning such tax is 8 cents or less, shall receive one-half of its 'assured minimum' if said minimum exceeds the sum that would have accrued therein from a tax of \$10 per \$1,000 valuation. If said minimum is less than the proceeds of such a tax, but more than would have been the proceeds of a tax of \$5 per \$1,000, the town shall receive the amount by which said minimum exceeds the proceeds of such a \$5 tax.

Section 13. "A town in which the proportionate amount paid by such town of every thousand dollars of state tax as established by the last preceding valuation made for the purpose of apportioning such tax is more than 8 cents but not more than 16 cents, shall be allotted one third of its 'assured minimum' if said minimum exceeds the sum that would have accrued therein from a tax of \$7.50 per \$1,000 valuation. If said minimum is less than the proceeds of such a tax, but more than would have been the proceeds of a tax of \$5 per \$1,000, the town shall be allotted the amount by which said minimum exceeds the proceeds of such a \$5 tax.

Section 14. "A town in which the proportionate amount paid by such town of every thousand dollars of state tax as established by the last preceding valuation made for the purpose of apportioning such tax, is more than 16 cents but not more than 40 cents, shall be allotted one half the amount by which its 'assured minimum' exceeds the amount that would have accrued therein from a tax of \$5 per \$1,000 valuation.

amount by which its 'assured minimum' exceeds the amount that would have accrued therein from a tax of \$5 per \$1,000 valuation.

Section 14a. "Every town in which the proportionate amount paid by such town of every \$1,000 of state tax as established by the last preceding valuation made for the purpose of apportioning such tax is more than 40 cents but not more than 50 cents, shall be allotted one half the amount by which its 'assured minimum' exceeds the amount that would have accrued therein from a tax of \$5 per \$1,000 valuation, provided its valua-

referred to:

15Net average membership is defined as "the average membership of such year as shown by the school registers, increased by the number of pupils resident therein whose tuition in the public schools of another town, for not less than half such year, the town has paid, decreased by the number of non-resident pupils attending its schools for not less than half such year."

<sup>&</sup>lt;sup>18</sup>See F. H. Swift, Public-School Finance in Massachusetts, Studies in Public School Finance, the East. p. 29.

p. 29.

<sup>14</sup>The account of the apportionment of the fund is based on *Massachusetts General Laws Relating to Education*, 1927, pp. 11-14, ch. 70, Part I, secs. 1-7, and Part II, secs. 8-18.

tion as established for the purpose of apportioning the state tax when divided by the net average membership of its public day schools [see footnote 15] for the year ending on the next preceding June 30, yields a quotient which does not exceed 75 per cent of the quotient so obtained for the commonwealth as a whole, and provided its expenditures per one thousand dollars of valuation for support of public day schools from funds raised by local taxation for its last preceding fiscal year exceeds by at least 25 per cent the average of such expenditures for the commonwealth as a whole for expenditures for the commonwealth as a whole for same year.

The laws provide that the allotments made under each section of the law just quoted shall be paid in full in the order given, and in case the funds, including the supplement from the proceeds of the income tax, are insufficient to meet the allotments in full under any section, after paying the allotments under preceding sections, such allotments under this section shall be proportionately reduced and paid. No allotments would be paid under succeeding sections. It is assumed that allotments have been paid in full, however, since no supplement was required from the income tax for 1926.

Appropriations from State Ordinary Revenues and General Fund

State department of education.-Moneys appropriated to the state department of education from the state ordinary revenues are expended in the form of flat salary and expense quotas as provided in the appropriation act.16

Superintendency unions.-The state reimburses superintendency unions two thirds of the salaries and expenses paid to superintendents, not including any amount in excess of \$2,500 for the salary and \$400 for the expenses of any superintendent. This reimbursement is apportioned among the towns forming the union in proportion to the amounts expended by them for the salary and expenses of the superintendent.17

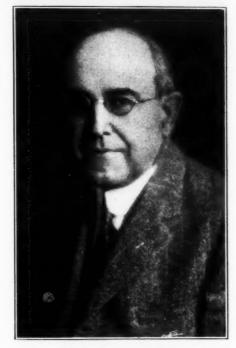
Vocational education.—The state reimburses towns one half the net maintenance cost of local or district independent industrial, agricultural, or household-arts schools, except agricultural departments in high schools, which receive two thirds of the salaries of instructors therein. The state reimbursement for tuition in such departments in high schools is to the same extent and under the same conditions as is provided for regular tuition in public high schools.18 (See succeeding paragraph.) The state reimburses towns maintaining continuation schools one half the sum raised by local taxation and expended for their maintenance.19

State aid for high schools.—A town of less than 500 families maintaining a high school is reimbursed by the state \$250 for a principal and for each teacher devoting full time to said school, with proportionate amounts for those devoting only part time, not to exceed \$1,250 for any one school.20

High school tuition.—A town of less than 500 families is reimbursed by the state a fractional part of the whole amount paid by it for tuition of high school pupils according to valuation as follows:21

Va	duation of town	Fractional part of tuition cost reimbursed by state
	less	All
\$1,000,000 More than	******************	%

The laws further provide that no town shall receive any reimbursement under the two sections just described "if its valuation for its fiscal year preceding said school year, divided by the net average membership of its public schools (see footnote 15) for the school year preceding the year for which reimbursement is



DR. FRANK A. BOUELLE Superintendent of Schools-Elect, Los Angeles, Calif.

Mr. Frank Bouelle, on January 31, took over the duties of superintendent of schools of Los Angeles, succeeding Mrs. Susan M. Dorsey, who retired after 32 years of service in the Los Angeles schools.

Mr. Bouelle, who had been an assistant superintendent in Los Angeles since 1923, was a "dark horse" and was selected because of his remarkable administrative ability and his capacity for harmonious cooperation with his fellow coworkers.

The new superintendent is a native of Los Angeles and was educated in the schools of Los Angeles, the University of Southern California, and the Los Angeles Normal School. He was principal of the Lamanda Park grammar school from 1893 to 1895, and later was successively principal of the Highland Park School and the LaFayette Junior High School.

School.

Since his appointment as assistant superintendent in 1923, Mr. Bouelle has had charge of the school safety program, including traffic work and the establishment of school tunnels. He also supervised the vacation schools, the department of agriculture, manual training, and penmanship. He acted as a consultant of the physical education department and assisted in the tree-planting campaign on school grounds.

claimed, exceeds the corresponding quotient for the commonwealth."22

High school transportation.-A town of less than 500 families is reimbursed a fractional part of the amount spent for transportation or board of high school pupils according to the average amount for three years expended per \$1,000 from local taxation for the support of public schools as follows:23

Average	amount expende	Fractional part of transportation cost reimbursed by state
More than \$4	but not more th	han \$5 ½
More than \$3	but not more th	han \$6 %
More than 5	86	All

Wards of the state.-The state pays the tuition in the public schools and transportation costs of any child over 5 years of age placed

<sup>23</sup>Ibid., p. 17, ch. 71, sec. 9. <sup>23</sup>Ibid., pp. 16-17, ch. 71, sec. 7.

elsewhere than in his home town by the department of public welfare.24

Sight-saving classes .- The director of the division of the blind is authorized to expend the amount appropriated (\$14,000 for 1926) to provide sight-saving classes for children certified by any reputable oculist as fit subjects for instruction therein.25

Teachers' pensions.—Funds provided for teachers' pensic...s are not apportioned on any general basis, but are expended to meet the state's obligations as the title implies.

Conclusion
Underlying principles of Massachusetts plan. -The funds provided by the state for the various appropriations described in the immediately preceding paragraphs, for the year 1926, were presented in Table II. In Table I it was shown that such appropriations constituted, during the year 1926, approximately 34 per cent of the total state aid provided for public schools. No further consideration is deemed necessary of this phase of state aid. The present account may well be concluded with certain observations regarding the Massachusetts plan.

A study of the policies described in the present account of the Massachusetts plan of state aid, will show that Massachusetts is definitely committed to certain principles. Space does not permit a detailed consideration of these principles which, however, may be summarized as

follows:

1. State aid should be given in the form of reimbursements for moneys previously expended, and should not be paid in advance.

2. The state should distribute a certain part of its state aid to all communities regardless of wealth. Obviously, such a policy tends to avoid the charge that the wealthier communities are being unduly taxed for the benefit of the poorer. It will be seen that the "ordinary reimbursements" granted from the general school fund fulfill this purpose and may be designated as reimbursements to afford general relief.

3. A large part of the aid given in Massa chusetts is based upon the belief that an important function of state aid is the stimulation of local effort.

4. Massachusetts recognizes that with the state rests the responsibility of equalizing the school burdens, revenues, and thereby educational opportunities.

It is her recognition of these principles that has led Massachusetts to disburse the income of the Massachusetts school fund and supplementary reimbursements from the general fund in accordance with methods which attempt to give recognition to the principles commonly involved in plans for apportioning what have come to be known as state equalization funds.

<sup>24</sup>*Ibid.*, pp. 41-42, ch. 76, sec. 7-9. <sup>25</sup>*Ibid.*, p. 9, ch. 69, sec. 16.

# New Single-Salary Schedule at Manitowoc, Wis.

The board of education of Manitowoc, Wis., has adopted a single-salary schedule for the teaching staff. The schedule recognizes equal pay for equal training and service regardless of the division in which the teacher works, and includes the special features of summer-school attendance once every four years, and a plan for cumulative sick leaves during a period of four years.

Under the schedule, teachers are divided into seven groups, namely, G, F, E, D, C, B, and A. Teachers in group G, graduates of a two-year normal course, begin at a minimum of \$1,000, advancing \$100 for the first two years, and \$50 for the succeeding eight years, up to a maximum of \$1,600.

Teachers in group F, graduates of a two-year normal course and one half year of college work, begin at a minimum of \$1,050, advancing at

the rate of \$50 for the next ten years, up to a maximum of \$1,650.

Teachers in group E, graduates of a two-year normal course and one year of college work, begin at a minimum of \$1,100, advancing at the rate of \$100 for the next three years, and \$50 for the succeeding seven years, up to a maximum of \$1,750.

Teachers in group D, graduates of a two-year normal course and one and one half years of college work, begin at a minimum of \$1,150, advancing at the rate of \$50 for the next ten years, up to a maximum of \$1,800.

Teachers in group C, holders of a college degree, begin at a minimum of \$1,300, advancing at the rate of \$100 for two years, and \$50 for the next eight years, up to a maximum of \$1,900.

Teachers in group B, holders of a college degree and having one half year of graduate work, (Concluded on Page 140)

<sup>16</sup> Massachusetts Acts and Resolves, 1926, pp. 79-80. ch. 79; Massachusetts Department of Education, Annual Report, 1926, Part I, p. 49.

17 Massachusetts General Laws Relating to Education, 1927, p. 25, ch. 71, sec. 65.

18 Ibid., pp. 31-32, ch. 74, secs. 9, 10, and 12.

10 Ibid., p. 19, ch. 71, sec. 24.

20 Ibid., p. 16, ch. 71, sec. 5.

21 Ibid., p. 17, ch. 71, sec. 8.

# What About School-Board Conventions?

George Stuart Dick, Supervisor of Rural Schools, Department of Public Instruction, State of Wisconsin

The district school board constitutes the business management of the free public schools. Its members are elected by the voters who must be residents of the district. The people, following the law, give to this board the custody of the money that goes to the support of the free schools. Directed by the people they transact all necessary business, buy and sell land, purchase plans and building materials, supervise the erection of buildings, select furniture and furnishings. Hence, ability is necessary to recognize a good school site, size, drainage, and surroundings. The board must understand grounds and buildings, sanitation, school heating, lighting, and ventilation. The furniture and furnishings must meet the demands of the age, size, and peculiar comfort requirements by pupils and teachers. The proper placing of these things is important. Schoolroom decoration, even the choice and combination of colors, may make or spoil the whole job. Abundance of good water wisely supplied is many times a rather difficult problem, but it must be correctly solved. Proper toilet accommodations is another When all these things are properly essential. in place, the how of keeping the whole sanitary, clean, neat, and attractive requires some ability in business direction and management.

The perpetuity of the right condition of the material part of the school, although essential amounts to but little, if the board makes a mistake in the most important part of the whole public-school system—the selection of the right teacher. Truly, as are the school board and the teacher, so will be the school and its results. The board alone has the legal responsibility for the teacher's employment. This task must be guided by the ability to recognize the right teacher personality, added to physical, mental, and moral education and training. This selection cannot always be left to the judgment of those who may have teachers to locate.

## No Previous Opportunity to Prepare for This

Work
Persons selected for membership on these school boards have had no training for this rather special line of work, and there is no established school to give such training. is no compensation for this work to enable persons to take such training, if there were such schools. The annual turnover or change is so great that it brings into service a large number of persons absolutely without needed experience. Of the 24,000 school-board members in the State of Wisconsin, 5,000 are new each year.

Legal Authority for Conventions Our thoughtful lawmakers realizing the need

enacted the following statute:

Section 39.07, Subsection 9. The county superintendent of schools shall annually call and hold at least one school-board convention for his superinleast one school-board convention for his superintendent district at the county seat, or some other convenient place for the purpose of consultation, advice, and instruction upon matters pertaining to the management of the schools. The county superintendent may determine the number of days each convention shell be in accordance. convention shall be in session, provided that no convention shall be held more than two consecutive days. Each district clerk shall, and the director and treasurer, may attend such convention. Each member present shall be allowed four dollars for member present shall be allowed four dollars for each day's attendance and mileage at the rate of three cents per mile. The county superintendent shall keep a record of the attendance of all members at each morning, afternoon, and evening ses-

Editor's Note. The state of Wisconsin conducts every year a series of county school-board conventions. Since there are many counties in the state, there are many conventions. These gatherings are in charge of Dr. George S. Dick, the author of this article, who has probably conducted more gatherings of this kind than any other man in the United States. Mr. Dick describes in a lucid fashion just what the aims and objects of the modern school-board conventions are. He is an unquestioned authority on all problems that concern the rural school officials, and his article, therefore, is of unusual interest.—The Editor.



GEORGE STUART DICK State Supervisor of Rural Schools, Madison, Wis.

sion of the convention during the days the convention shall be in session, and shall issue to each member in attendance a certificate of said attendwhich is filed with the school-district clerk and serves as a basis or evidence for drawing the necessary warrant upon the district treasury.

Value of These Conventions

Short as the annual session is, it has served well and continues to increase in the quality and effectiveness of this service along lines of "consultation, advice, and instruction upon matters pertaining to the management of the

The better way to judge of the value of one of these conventions would be to see one in action, and then follow those in attendance back to their home schools and communities, and there study the results seen in school equipment and in the young people as they live in the school and community. Of course, here much depends on the carrying power of those in attendance. The audience is composed of schoolboard members, teachers, supervising teachers, county superintendents, a representative of the state department of public instruction, and others who may be interested.

The Program

1. The county superintendent desiring better school results from a more close cooperation of all school factors, in his talk carefully explains the why of plans and doings of himself and office force. He clearly sets forth his plans for the coming year's work and many times clears away wrong ideas that people may have gotten. Sometimes a talk is given by his supervisory force.

2. As a state supervisor of schools from the department of public instruction is always present, he gives an address timely in subject. In 1928 the topics pertained largely to the new school laws of 1927 and their interpretation. When teachers are present, the subject and its treatment always consider how teachers are to be helped. The time of the year that these meetings are held also determines somewhat the topics to be considered. In 1928 there was such a call for the explanation of new laws, especially the new equalization law, that 36 conventions were held previous to the annual-district-meeting time, the second Monday of July. These meetings were very timely. Effective work was done by live talks on work to be done at the annual meeting, how the law says it must be

conducted. Many talks were given on "The value of a nine months' instead of an eight months' school year." "Getting ready for the opening of the school year in September," etc. As a result of this work there are many more nine months' schools. County superintendents report greater care taken in having buildings, grounds, as well as inside equipment really ready for the school opening in September. In many districts new, up-to-date schoolhouses were erected, or old ones remodeled and improved during the summer vacation.

3. Sometimes a talk on health problems, such as communicable diseases in school, home, and community by a member of the state board of health, or the county nurse is given; sometimes a talk from a county farm agent, and occasionally there is a brief number of entertainment, as music, vocal, or instrumental.

4. Invariably a "question box" is open to any person who wishes to ask a question on any phase pertaining to schools or school interests. The county superintendent takes these questions, all unsigned, one at a time and reads them publicly. A representative from the state department discusses each question fully from the viewpoint of the Wisconsin school laws, or from the latest approved ideas governing school problems. The audience is urged to add oral questions that may promote discussion. oral questions add to the interest and to the length of time which extends to one hour or three hours. At the close of the program many private interviews are held for the discussion of matters that demand private treatment.

If the state representative is uncertain of the answer required, he asks the name and address of the one asking the question. A few days later a full reply is mailed to the inquirer, after the question has been carefully looked up at Madison. The number of questions asked at one meeting often reaches fifty or more, and many additional questions are handled at Madison and answered by mail at an early date.

Types of Questions Asked

The types of questions asked are shown by the following taken from those asked during the month of October, 1928:

a) How can we secure a deed for our school site that was given to the district thirty years ago but no deed has ever been given?

b) How may we borrow money to build a new schoolhouse?

c) We want a change in the kind of district. Will you come and discuss with our people and advise what kind of school we should have?

What is the difference between a union free high school and a consolidated high school?

Explain the law by which rural territory may be taken from a high school district.

Explain the equalization law. Discuss the transportation laws.

Should children be kept after school to get lessons?

What is the law on child punishment?

Explain the duties of each member of the school board.

Discuss the treasurer's bond.

How can we get rid of a teacher who is no good?

m) Explain the high-school tuition law. Is there any Wisconsin law that pren)vents a married woman from teaching in the

state? What do they mean by silent reading? 0)

Explain heating, lighting, and ventilap) tion of a schoolhouse.

Change in Personnel, Transportation and Work

Accomplished
There is an increasing interest in such topics on the part of the people who attend these conventions. There have been many improvements in the past nine years indicated by the appearance and spirit of school-board members. At one convention nine years ago, one school-board member walked fifteen miles, another walked thirty miles, some came on horseback, or with horse and buggy, while at the present time some come in rattling Fords, and many of the best makes of automobiles roll quietly to schoolboard conventions. It is certainly a pleasure to note the improved knowledge of school affairs intelligently expressed. Many younger men and women are coming into the work, and you can see from their ideas clearly and decidedly stated that personal interest in their own children and in the children of their neighbors is what prompts them to work for a school better in every particular.

The boards aim to reach this by securing grounds ample, well chosen, and properly equipped, buildings wisely planned and erected according to modern plans and specifications, indoor chemical toilets, furnished and equipped with the thought ever in mind that these conditions and comforts are what our children must have.

Instead of the words common in other days-"red tape," "We voted that our treasurer need not give a bond," "We hired that person because we wanted to—a certificate would not help her to teach school," "Who pays these bills?" "We propose to do as we please"—instead of these unpleasant remarks of the past, they are replaced by the following: "We appreciate help from the department and want to know the

laws," "How shall we go about it to have our treasurer have the legally required bond?" "What is the best kind of a teacher for our school, and how can we secure such a teacher?" "Explain the duties of each member of the school board," "I am not a member of the board but I am interested and shall certainly come next year." "Mr. Superintendent, be sure to give plenty of time for the question box next time," and another calls out, "Give the whole day to the question box next time."

Conclusion
In the year 1928 the first convention was held on June 4, the last one on December 7. Seventy-nine in all; the attendance was about 23,000. It is indeed gratifying to note the continually improving attitude on the part of the members and others in attendance. They endeavor to cooperate more and more with one another, and with authority in securing for the boys and the girls the best possible schools and other advantages that taxes will secure. Great is the work of the school board and greater are the results that their faithful and efficient efforts accomplish. Practically without pay, theirs is a labor of love, and it increases their joy in service when they receive from the people whose interests they serve, and from the state department in particular, a helpfulness prompted by an interest, sympathy, and a real desire for their success.

These school-board conventions give to the state a most excellent opportunity for an annual personal contact with all the school-board members of the state. The opportunity must be improved by carrying to these gatherings of schoolboard members, not destructive criticisms, but constructive messages of helpful, sympathetic inspiration.

The School Board and the Superintendent

H. B. Heidelberg, Superintendent of Schools, Clarksdale, Miss.

The administrative success and the standards of a school system are largely determined by

1. The personnel of the board of education.

2. The personality and efficiency of the superintendent of schools.

3. The mutual understanding between the board of education and the superintendent of schools concerning their respective powers, duties, and legitimate spheres of activity.

It may seem trite to say that the members of the board of education should be selected without regard to local political affiliations. They should be men and women of integrity, intelligence, success, and high standing in the community, and actuated by no other motives than those which lead to the successful administration of the schools in the interest of the children alone.

The most important function of the school board is the selection and employment of the superintendent of schools. To this official should be delegated whatever necessary authority the state has not already conferred on him by law, to enable him to run the schools in accordance with administrative principles and methods of proven success.

Probably more competent school superintendents fail to retain the support of their school boards by conflicting ideas concerning their respective spheres of activity and authority, and for lack of general policies carefully defined and adopted, than for all other causes combined. If misunderstandings and encroachments are to be avoided, it is essential that all administrative acts, both of the school board and of the superintendent, should harmonize with general policies and accurately defined powers, and duties mutually understood, adopted officially

in written form, and spread on the record of proceedings of the board.

An outline is given below of the organization, meetings, and functions of the board of education, and of the duties and powers of the superintendent of schools, as adopted and in force at Clarksdale, Mississippi. The statement is the outgrowth of a long period of harmonious relationship between an intelligent, patriotic board of education, in which only good citizenship is a prerequisite for membership, and a superintendent of schools who has served continuously for 24 years. There is a dominant sentiment in the community which refuses to permit the injection of local politics into the appointment of members of the board, and into the administrative policies followed by the board.

The outline is nothing more than a formal statement in written form of a relationship and of policies which have been gradually built up and placed in operation during a long period of

It would be a fatal mistake for a superintendent to urge his board of education to adopt a statement of policies and powers, like the preceding, until the sentiment of the members is ripe for its adoption. Consistent effort, continuously and consciously directed throughout a period of years, is required to educate the citizens and the members of a board of education to the point where they will accept certain policies as fundamentally right. Men and women, as board members, like to assert their power as individuals, and they are loath to surrender it out of board meetings, or to delegate it even to the chief executive, the superintendent of

After a year following the formal adoption of the outline by the school board of Clarksdale,

there has not appeared the slightest effort or desire on the part of anyone to make any amend-

ORGANIZATION, MEETINGS, AND FUNC-TIONS OF THE BOARD OF EDUCATION, AND DUTIES AND POWERS OF THE SUPERINTENDENT OF SCHOOLS, CLARKSDALE, MISSISSIPPI I. Organizations of the Board

Principles of Organization

1. The members of the school board, as in-dividuals, are citizens only. They have actual authority only when the board is in formal session.

2. The control over the schools by the school board is not by individual members, but through the votes, whereby rules, regulations, and policies

The president, the secretary, and the president protem. shall be elected from the board of education by its membership. Officers

President.

2. Secretary.
3. In case of the inability of the president to perform his duties, the board shall elect a temporary chairman to act during his absence.

C. Committees

C. Committees

The board shall generally transact its business in committee of the whole. The president may, at his discretion, or shall, upon the request of the majority of the members present at any legal meeting, appoint such temporary committees, as he or the board may see fit to provide for. These committees shall enjoy such executive authority as shall be specifically granted to them by the board of education by formal board action.

II. Meetings

A. Regular Meetings

A. Regular Meetings

The board of education of the Clarksdale city schools shall meet on the second Saturday of each month at 2:45 p.m. at the Secretary's office, or at such other time and place as shall be provided in the notice of the meeting, called by the superintendent of schools, provided said second Saturday falls on or before the 10th of the month, otherwise on the first Saturday of the month.

B. Special Meetings

Special meetings of the hoard may be called by

B. Special Meetings

Special meetings of the board may be called by the superintendent of schools, by the president, by the secretary, or any other member. Notice for all meetings must be given at least 24 hours before the meeting is to be held, except in special case of measurement.

emergency.
C. Public Attendance

All meetings of the board shall be in executive session, unless, by a majority vote of the board, it is decided to go into open public session.

Three members shall constitute a quorum for any meeting. However, the election of the superintendent, principals, and teachers shall be made effective by a majority vote of the entire board.

III. General Functions of the Board of Education

The board of education shall be the legislative authority in accordance with which it shall exercise the following functions:

1. Interpret the needs of the community and the requirements of the professional organization.

2. Adopt policies carefully defined and recorded.

3. Select the chief executive when the life of the chief executive when the life is a constant.

Select the chief executive, who shall be the

4. Pass upon, approve, or modify the annual financial budget submitted by the superintendent.

5. Advise with the superintendent of schools, affording a group judgment, on his recommenda-tions for extensions, or readjustments of the edu-cational activities of the schools.

6. Require such reports from the superintendent of schools and others as they deem necessary to keep themselves informed of the work and conditions of the schools.

Approve the list of bills and expenditures 4. Approve the list of bills and expenditures which have been previously authorized when the same shall be properly approved by the superintendent and the auditing committee.

8. Represent the needs of the schools before

the public. Act as a court of final appeal for teachers and patrons, in cases which the superintendent has been unable to adjust or which may have been appealed from his decision. All such appeals and titions must be made in writing to receive consideration.

Contract with such principals, supervisor, teachers as are recommended by the superin tendent of schools.

(Concluded on Page 142)

# A Technique for the Local Determination of the Adequacy of Teachers' Salaries

Clay C. Ross, Floyd W. Reeves, and John Dale Russell

In almost every school unit the question of the adequacy of salaries paid teachers is of paramount importance. There are probably few communities in the entire country where this question has not been in the foreground of consciousness of both school administrators and the general public some time within the past decade. The principal technique that has been employed for judging the adequacy of teachers' salaries has been comparison with other similarly situated school systems. This type of external comparison has been greatly facilitated by improved reporting on the part of local systems and of state systems as well, and a valuable contribution has been rendered by the Research Division of the National Education Association in making available comparative salary figures.

Before proceeding further, the issue of the adequacy of teachers' salaries should be defined by answering the question "Adequate for what?" In this article the writers have just one interpretation of adequacy: "sufficient to purchase a reasonably efficient teaching service." Larger and more theoretical considerations of the value of the service rendered society are excluded from the present discussion. The humanitarian point of view, which might consider the question from the standpoint of the teacher as an individual, is also outside the bounds of this discussion. The writers here consider the school as an organization for the education of children, not as an institution for providing jobs for teachers, and our present interest in the adequacy of teachers' salaries arises only from the necessity of providing satisfactory instructional service.

The writers recently faced the question of the adequacy of teachers' salaries in making a survey of the public schools of Shelbyville, Kentucky. In connection with this survey use was made not only of the technique of external comparison with other cities, but other techniques, based upon internal criteria, were developed, which it is the purpose of this article to describe.

Defects of Salary Comparisons

The specific shortcomings of the technique of external comparisons may first be pointed out in order to show why it seems desirable to supplement this method by other techniques. Five shortcomings of the comparison method of judging the adequacy of teachers' salaries may be pointed out.

1. It is usually rather difficult to find communities which are completely comparable and among which comparison would be fully justified; that is, each community is unique, probably no two communities in the entire country being exactly alike in every essential particular. The selection of cities among which comparison is to be made always involves discrimination as to the particular factors upon which rather complete comparability is felt necessary, other factors upon which there is a lack of comparability being disregarded. The exercise of such discrimination leaves the analysis open to the charge that there has been a deliberate selection of cities for comparison with a view, not so much to their comparability in general, but rather to support the argument for a desired change in the salaries of the teachers in the community being studied. In order to convince the thoughtful layman that teachers' salaries in a given community are not adequate because they are below salaries paid in certain other communities, it is necessary to prove rather complete comparability on numerous points,

such as population, ability to finance schools, tax rates, type of school organization, qualifications of teachers employed, and numerous other items. Strictly scientific selection of cities with which comparison is to be made will result in the elimination of practically every community with which comparison was thought possible. The person using the technique of comparison is then forced either to abandon the technique of comparison entirely, or to use for comparative purposes communities whose comparability is somewhat doubtful.

2. The purchasing power of the teachers' salaries varies among communities. A salary of \$1,500 will actually buy more of the necessities and comforts of life in some cities than in others. This factor is usually ignored in selecting cities for comparison—in fact, it cannot well be taken into account in small cities because accurate figures on cost of living are not available for any except the larger cities. The assumption that cities of the same size and situated in the same region will always have the same cost of living remains yet to be proved.

The third type of difficulty in using the technique of comparison arises from the lack of reliable salary data upon which comparison may be made. In cities with carefully controlled reporting systems this may not be a real difficulty; but the figures given in annual reports of many school systems are somewhat unreliable when used for comparative purposes. This unreliability may be tested out, for example, by checking the discrepancies between "average salaries of teachers" as reported, and "average salary payments per teacher" as derived by dividing the instructional salary payments by the number of teachers. A check of this kind usually reveals wide differences of meaning in the reported figures for "average salaries." Even in states with generally excellent reporting systems there is usually a wide variation in the degree of reliability in the reports from the various cities. It is necessary, therefore, in all instances where the comparative technique is used, to establish the reliability of the figures from each city upon which the comparison is based.

Comparing Administrative Efficiency
4. Even granted the possibility of finding completely comparable communities and the existence of reliable data, the comparative technique makes it absolutely impossible to take into account any administrative efficiency which may have been evidenced in the fixing of teachers' salaries. There is a rather widely current opinion to the effect that a given salary always buys exactly the same quality of instructional serv-



ice. Within broad limits this is probably true; but there is no reason to believe that administrative efficiency might not operate to get greater returns for a given expenditure for teachers' salaries in one city than in another. For example, a school system maintaining such administrative policies as the early filling of vacancies and satisfactory conditions of teaching service, very probably is able to hire better teachers at a given salary than is a school system in which vacancies are not filled until late in the summer or in which conditions of teaching service are less favorable.

The flow of teachers from rural districts to the cities is partially explained on this basis. A recent study in Indiana¹ shows that "opportunity to work under a better administrative and supervisory system" is a more potent influence than salary in drawing rural teachers into positions in city systems. So long as school administration in cities continues to be on a higher level than the administration provided for rural districts, as is now the case quite generally, it will undoubtedly be true that a given salary will buy better teachers in the city than it will in the rural districts.

Since the quality of administrative service varies among cities, it cannot be concluded that the average salary paid teachers is a fair measure of the quality of teaching service provided. No one would think of comparing the quality of coal or chalk used by two school systems by simply examining the price paid per ton or per case. We know that, with commodities such as these, the careful administrator buys the same quality at a cheaper price than the heedless, slipshod administrator. This same administrative efficiency without doubt operates also in the purchase of teaching service. Thus the comparative technique of studying teachers' salaries wholly fails to take into account any efficiency displayed by the administration in the purchasing of teaching service.

5. Finally, the whole question as to the interpretation of the comparative figures is somewhat doubtful. Should the city in question attempt to equal the mean of the comparable cities? Should it attempt to equal the highest standard of the group? Or should it attempt to exceed anything being done by comparable cities? These questions the method of external comparison fails to answer. Certainly the tendency to base standards upon the average of other comparable cities can lead to little or no general progress and may become thoroughly

Failure of External Criteria

of other comparable cities can lead to little or no general progress and may become thoroughly vicious if wrongly used. The best logical arguments probably lie with the belief that the best practice in comparable cities should be used as the guide, but in this case there is a subjective element in the decision as to which is the best practice.

It is even conceivable that all comparable

cities are actually paying inadequate salaries, and that advice based on such comparison might be very unsound. Certainly any widespread tendency in the direction of inadequate salaries entirely escapes consideration when the method of comparison with other cities is used. Thus the application of the technique of external comparison is not only difficult but is likely to leave the situation very much unchanged, except in communities which have fallen behind the general trend of progress to a remarkable degree.

Internal Criteria of Adequacy of Salaries
The realization of the shortcomings of exter-

<sup>&</sup>lt;sup>1</sup>Report of Indiana Rural Survey Commission. p. 45.

nal comparisons led the writers to develop another technique, based upon internal criteria, which was used in the case of the Shelbyville, Kentucky, survey. By this method the salaries paid teachers in the local community are evaluated with respect to five criteria of adequacy. The first of these is the relation of salaries paid to the cost of living in the community. second is the extent to which teachers find it neecessary to supplement their salaries by outside employment, either during the school year or during the summer. The third is the extent to which salaries enable the teachers to make savings. The fourth is the degree to which present salaries are providing the schools with teachers who have a satisfactory amount of training. The fifth is the extent to which the present salary schedule recognizes exceptional merit and allows the school system to retain its outstanding teachers.

Data to answer the first three questions were gathered in the case of the Shelbyville survey from each teacher by means of a questionnaire which is reproduced below. Assurance was given the teachers that information furnished on the questionnaire would remain confidential and that only averages and general tendencies would be reported. The data thus gathered are used to illustrate the application of this technique.

Bureau of School Service University of Kentucky Survey Series Teachers' Form No. 4 

What is the annual salary you are this year receiving?

I. Cost of Living

1. What are your expenses for board and room per month?...

II. Outside employment

A. During school year

1. Do you find it necessary to supplement your salary by other employment during the school year? (Yes or no)...

2. If your answer to the above question is "yes," approximately how much are you able to add annually to your income by outside employment during the school year? (If the income or any port of it is not received in cash, estimate it at its money value) \$

3. If your answer to question 1 (above) is "yes," indicate the kind of outside employment engaged in during the school year

B. During the summer months

B. During the summer months
1. Do you find it necessary to supplement your salary by employment during the summer months? (Yes or no).
2. If your answer to the above question is "yes," approximately how much are you able to earn by such summer employment? \$.
3. If your answer to question 1 (above) is "yes," indicate the kind of employment?

ment? \$... If your answer to question 1 (above) is "yes," indicate the kind of employment engaged in during the summer months.

the summer?

Does your salary as teacher (exclusive of what you are able to earn outside) allow you to save enough to pursue further training in a summer school each summer? (Yes or no)......

mer? (Yes or no).

B. Permanent

1. Does your salary as a teacher (exclusive of what you are able to earn outside) allow you to carry insurance or make other investments or savings which will take care of you when you reach the age when you should retire from teaching? (Yes or no).

2. If your answer to the above question is "yes," what was the amount of such savings made by you last year? \$......

#### Salaries in Terms of Cost of Living

The first approach to this method of studying the adequacy of teachers' salaries was through the evaluation of salaries paid, in terms of the standard of living which they purchase. It is generally conceded that the minimum annual salary on which a teacher can satisfactorily live, that is, the bare subsistence level, is approximately double the cost of board and room for twelve months in the community in which she teaches.1 The inquiry among Shelbyville teachers showed that the range of prices paid

<sup>1</sup>Almack and Lang, Problems of the Teaching Pro-fession, p. 243.



DR. GEORGE A. ALLEN, JR.

State Superintendent of Public Instruction,
Topeka, Kans.

Dr. George A. Allen, Jr., recently elected state superintendent of public instruction for the state of Kansas, is a product of the Kansas schools and has been engaged in school work in its various phases in the state.

Dr. Allen is a graduate of the teachers' course at Campbell University, and was graduated from the State Teachers' College at Emporia with the degree of B.S. in education. He attended several terms at the University of Kansas, where he completed his graduate work leading to the Master's degree.

Dr. Allen's first teaching was in the rural schools of Jackson county, Kansas, where he later served as county superintendent for two terms. He filled the position of teacher, principal, and superintendent in a number of Kansas cities, among them Frankfort and Topeka, where he gained considerable experience in the training of teachers.

teachers.
Dr. Allen was assistant state superintendent of Kansas from 1919 to 1923, and state superintendent since 1927. for board and room was from \$30 to \$50 per month. The amounts reported most frequently were \$35 and \$45. Practically all of those who reported a cost for board and room of less than \$40 were living at home with parents or relatives. In these cases the amount reported as expenditure for board and room probably does not represent the actual cost but really involves some contribution to the maintenance of the teacher by her parents or relatives. For that reason the figure decided upon as the index of the cost of board and room for teachers in Shelbyville was taken as \$45 per month, which was the median price paid by those teachers not living with their parents or relatives. On a twelve-months' basis the cost of board and room would amount to \$540, and if the principal is accepted that this amount represents half of the cost of bare subsistence, an annual salary of approximately \$1,080 was indicated as the very least that should be paid any teacher in this local school system.

It should be remembered that the calculation of salaries upon the basis of the subsistence level allows no return whatever for training. It is certainly fair for a teacher to expect a return as interest on her investment in training. In the case of elementary teachers with two years of training a very conservative estimate of this interest charge would lead to an addition of at least \$150 to the annual salary, and for highschool teachers with four years of training the increase for interest on investment in training should be at least \$300.

With minimum figures such as these in mind, it was possible to check the teachers' salaries as actually paid and to discover in the system in question certain marked inadequacies. However, it should be noted that this particular phase of the inquiry can reveal only those cases which fall below bare minimum, and it does not indicate whether superior teachers are being paid in accordance with their worth.

As stated in one of the introductory paragraphs of this article, the writers at present are not concerned with the humanitarian aspect of salaries that are below the level of minimum subsistence for teachers. There can be no doubt,

however, that the service rendered in return for such in adequate salaries must be, in general, unsatisfactory. A teacher, under such conditions, must inevitably develop a sort of inferiority complex, a general feeling that her work is of little worth, with disastrous results to her teaching personality. The inadequate salary tends to foster the development of the very opposites of such traits as leadership, selfconfidence, and self-respect, which are usually considered essential characteristics of a successful teacher. It is psychologically well-nigh impossible for a teacher who is willing to accept a salary below the minimum subsistence level, to develop either in herself or her pupils those traits of character associated with vigorous and well-rounded living.

Supplementing Salaries by Outside Employment The second internal criterion of the adequacy of salaries related to the extent to which the teachers found it necessary to supplement their salaries by outside employment. This inquiry was separated in two parts, the first dealing with outside remunerative employment during the school year, and the second dealing with remunerative employment during the summer months. Somewhat to the surprise of the local school officials, it was revealed that approximately one half of the teachers of the school system were engaged in outside work to supplement their regular salaries during the school year. Other teachers stated that they would engage in such outside work if they could secure employment outside of school hours. The amounts which teachers were able to add to their annual salary through outside employment during the school year were ascertained. It was rather interesting, after adding to the annual salary received by each teacher, the amount earned by outside employment, to find that the total earned, in school and out, corresponded rather closely to the figure adduced as the minimum subsistence level. Thus the failure on the part of the board of education to pay adequate salaries was in most instances met on the part

as a full-time job. The writers are very strongly of the opinion that employment by teachers outside of school hours is not conducive to the best educational results. The job of teaching should absorb all the energies of those who engage in it, and obviously salaries should be sufficiently high to make it unnecessary for teachers to seek outside employment in order to supplement regular salaries. It is conceded that some types of outside employment are more detrimental to the welfare of the schools than others.

of the teacher by a refusal to look on her work

Tutoring as Outside Employment In the case under consideration it was discovered that the outside employment engaged in most frequently was the tutoring of pupils in the regular school subjects. This is certainly a thoroughly unsatisfactory condition. Besides the objection that tutoring outside of school hours absorbs the energy of teachers, which could better be devoted to the regular school work for which their salaries are paid, this type of outside employment has three other very objectionable features: (1) Some parents tend to look on the tutoring fee as a sort of bribe to insure the success of the child in school. (2) There is a professional courtesy which teachers feel they owe to each other, which makes it almost necessary for one teacher to promote a pupil tutored by another teacher, even though promotion may not be justified on other grounds. (3) The school system is likely to receive criticism from the parents who may gain the idea that pupils are purposely failed in order to give teachers a chance to earn extra money by tutoring.

The practice of tutoring pupils in the regular school subjects by teachers employed in the schools should be forbidden by the board of education, and there should be a clear understanding on the part of the teachers that outside employment of any kind is frowned upon. unless the contract clearly gives this right to the teacher. However, any rule passed by the board to prohibit outside employment during the school year should be accompanied by salaries sufficiently high to remove any necessity on the part of teachers to engage in such employment.

A second phase of this inquiry regarding outside employment related to employment during the summer vacation. Practically all the teachers in the system reported that they found it necessary to supplement their salary by some sort of employment during the summer months. All sorts of work were reported, but again tutoring of pupils seemed to be the most prominent. While the objections to employment of teachers during the summer are not the same as the objections to outside employment during the regular school year, it may be noted that the tendency to regard the teacher's salary as something other than a total annual remuneration is probably not for the best interest of the school. Through the necessity for summer employment teachers are very largely deprived of the opportunity for summer-session-course work, travel, and other experiences which would enable them to make continual professional growth.

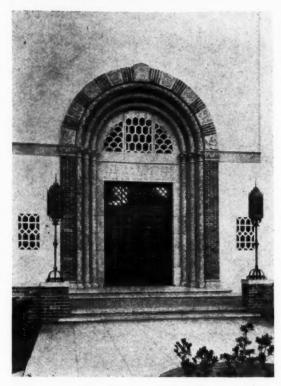
#### Salaries and Savings

The third criterion relating to the adequacy of teachers' salaries dealt with the question of the opportunity for the provision of savings. Two types of savings were studied; first, temporary savings, subdivided into savings for living costs during the summer vacation and savings for the purpose of financing further training; and, second, permanent savings for the purpose of insurance and old-age disability.

It is a rather common practice for a teacher to spend the summer vacation months as a "guest" of friends or relatives. The family so unfortunate as to have a member of the teaching profession in its connection, frequently has to subsidize this person to the extent of board and room during the summer vacation. It should be perfectly obvious that the annual salary of the teacher, though received in nine months of working time, should be sufficient to finance the teacher's living expenses during the entire calendar year. In the particular city under question, a large number of teachers indicated that it was necessary to depend upon friends and relatives for board and room during the summer. Obviously this is an indication of salaries below the subsistence level, and is open to the educational objections already pointed out.

The second phase of this part of the inquiry developed the fact that in the case of certain teachers, salaries were inadequate to finance further training that was desired. A few of the teachers even indicated that the training that they had previously received had been on borrowed funds and that their salaries had been inadequate for them to pay off the debt already incurred for their training.

The other phase of the inquiry related to the savings of a permanent type toward old age and disability. In the case of the Shelbyville teachers it was found that practically none of them were able to make such savings. At the time of the survey the State of Kentucky had no teacher retirement law in effect, and the teachers of this school system were making no savings whatever toward old age. Little or no life insurance was carried by any of the group, and other forms of savings were not being made. Only two conclusions are possible from such a condition: (1) Either the entire group of teachers are improvident and thriftless; or



ENTRANCE DETAILS, SOUTH PASADENA JUNIOR HIGH SCHOOL, SOUTH PASADENA, CALIF.

(2) salaries are inadequate to provide effective opportunity for savings.

The educational disadvantages of a salary schedule which does not allow savings toward old age relate chiefly to inability to retire superannuated teachers. The argument that an old and ineffective teacher has only her annual salary to live on is generally considered by a board of education as justification for retaining her in the system, regardless of how much they may desire to protect the educational well-being of the children. Salaries inadequate for the provision of old-age savings also militate against the formation of an effective teaching personality, handicapping the development of such traits as self-reliance, poise, and selfrespect.

#### Qualifications of New Teachers

The fourth criterion of adequacy of teachers' salaries was based upon a study of the qualifications of the recruits to the staff of teachers. In general, if the new members added to the teaching staff of a school system to fill vacancies meet the usually accepted standards of training and experience and prove successful as teachers, it must be judged that the salary schedule is rather adequate. On the other hand, if the new teachers have, in general, qualifications below

par, the indications are that either the administration has not set out to obtain adequately qualified teachers, or else the salary schedule is too low to attract the sort of recruits that are desired. This is a simple case of the operation of the law of supply and demand.

Remuneration of Superior Teachers

The fifth criterion, which relates to the provision in the salary schedule for the remuneration of teachers of exceptional merit, must be studied somewhat less objectively. If an examination of the salary list shows that all teachers are receiving approximately the same amount, with only a few above the mode and none receiving markedly more than a rather moderate average, it is a fair conclusion that teachers of exceptional merit are not being adequately remunerated. Thus while the average salary might be thoroughly satisfactory, the failure to provide distinctly superior salaries as a reward for unusually capable teachers would indicate the need of a readjustment in salary policy.

Evidence on this point can also be gathered by an analysis of the types of teachers who leave the system. If it develops that teachers showing higher capability tend to leave the system through the inducement of higher salaries in other school corporations, there is clear evidence of inadequate provision in the higher

salary brackets.

To summarize: From the illustrations that have been given it may be seen how it was possible in the Shelbyville survey to build up a strong case for higher teachers' salaries through the use of internal criteria. It may be remarked that resort to the technique of external comparison left little argument for increases in salaries. It is true that salaries in Kentucky school systems generally are somewhat below the level of those in other states. Consequently, figures from cities which might appeal to the lay citizens as comparable would not substantiate the argument for increased salaries. On the other hand, the study of the relation of salaries to cost of living, the necessity for outside employment, the ability to make savings, the qualifications of the new teachers in the system, and the retention of the capable teachers, clearly indicated the need for more adequate salaries. The simplicity of this technique makes its application possible in any school system interested in investigating the adequacy of its teachers' salaries, and the ease with which the conclusions can be grasped by taxpayers and voters makes this an effective procedure in campaigns for adequate salaries.

## Standards for School-Transportation Vehicles and Drivers

The board of education at Houghton, Michigan (School District No. 1, Portage Township), has recently adopted a series of standards which it will maintain in the employment of bus drivers and in contracting for the use of vehicles for carrying children to and from school. The standards are interesting because they involve a consideration of widely varying weather conditions in different seasons of the year. Houghton is in the Northern Peninsula where heavy snows and severe cold weather prevail for considerable length of time. Horse-drawn sleighs are necessary for transporting pupils over most of the roads during the winter time. In the late spring, in the summer, and in the fall the roads are excellent, so that busses can make splendid time.

School District No. 1 of Portage Township has a further interesting situation in that its centralized schools are not located in the City of Houghton, but many of the teachers live in

the city and must be transported to their schools. The busses, which are mostly owned in the city, accordingly carry the teachers out to the schools before they pick up the children. The standards and details are as follows: Vehicles

Inclosed vehicle kept in good condition.

Minimum capacity 30 pupils. Heated by foot warmer or suitable air-tight heater.

Low center of gravity.

"Prairie Schooner" type recommended.

Equipped with lamp or lamps visible from both front and rear, in accordance with state law. All wheel vehicles must be equipped with ade

quate brakes.
Contractors and Drivers

Contractor must furnish competent and responsible drivers.

sible drivers.

Contractor will be held responsible for order and moral conduct of the children in transit to and from school, and the enforcement of all regulations covering conduct of pupils which may be imposed from time to time by (Concluded on Page 142)

# The Principal as Supervisor

Charles Everand Reeves, Professor of Education, Elmira College, Elmira, N. Y.

There is a wide discrepancy between theory and practice in the supervision of teachers. Authorities on school administration and supervision maintain that at least half of the time of the principal should be given to supervision and that this is his most important duty. In practice supervision is usually a subordinate duty of the principal, teachers either being supervised by special supervisors or not at all.

Under present conditions of instability in the teaching personnel of most cities, the need for supervision of teachers cannot be questioned. With the great number of annual changes of teachers from system to system; with the total teaching service of the average teacher being but a few years; there is a continuous change of teaching personnel in most systems so that each year many new teachers must learn principles of classroom management, methods and technique of training, the evaluation and selection of specific subject material, and the like.

The importance of supervision rests upon our answer to three questions, the first two of which must be answered in the affirmative and the last

one in the negative.

Three Important Questions

1. Is the teacher important in the educational process? It must be answered that schools cannot exist without teachers and that the efficiency of a school depends largely upon the efficiency of its teachers. Buildings in themselves are not schools. No course of study will teach itself. The teacher is the largest single factor in the efficiency of the school.

2. Can the science and art of teaching be learned? Educators no longer question the value of training in determining the efficiency of the teacher. Of course it is sometimes held that there are "born" teachers, and it is true just as there are "born" artists, actors, lawyers, and physicians, but specialized training is necessary for success in teaching as well as in any other profession, even though one may have characteristics which make for success in a particular profession.

Is pre-training sufficiently effective to make training in service unnecessary? Professional training courses are valuable, but they can only make more certain, and shorten, the period of training in service that every successful teacher must undergo. One cannot learn to typewrite or to drive an automobile by reading about or listening to explanations of these activities, but it is conceivable that knowledge gained in such ways might shorten the process of learning and make for more accurate performance. Any technique can be learned only by practice in the work itself. It is true that normal schools give work in practice teaching, but it is not equivalent to the actual teaching situation and resort to training "on the job" is essential. Good training in service, after the professional course, is the best kind of training. It is in the actual situation that the teacher feels the necessity for improvement and makes the attempts with heightened interest.

Supervision is, therefore, important because the teacher is important to the educative process, and the technique of teaching can be learned, but it cannot really be learned for use until it is to be used.

Disadvantage of Special Supervisors

Since supervision of teachers is necessary, should it be done by principals or special supervisors?

1. There are disadvantages in the specialized character of the work of supervisors. It is sometimes contended that the special supervisor can be an expert in the teaching of a par-

ticular subject for all schools of a system, while the principal cannot be an expert in the teaching of all subjects. This contention will have to be granted, but it must not be forgotten that grave dangers accompany supervision by experts in particular subjects.

(a) Special-subject supervisors are likely to attach undue importance to the particular subject which they supervise. This often reacts unfavorably upon the time and attention devoted by teachers to other subjects of equal or greater importance.

(b) Special supervisors are seldom employed for all subjects so that the subjects for which no supervisors are employed, often the most important ones, are likely to suffer at the expense of the supervised subjects. Teachers are bound to give more attention to work that will be approved by those who act in the capacity of critics of their work. Probably the common criticism that schools are neglecting fundamental subjects and are giving too much attention to "fads and frills" is largely justified because the so-called "fads and frills" are given an undue importance by the employment of special supervisors of subjects that are usually included in this group. The employment of special supervisors is, frequently, wrong in principle since it often becomes a means of having the minor subjects "drummed up" to undue importance at the expense of the major subjects.

(c) Another danger in the employment of expert subject-supervisors is that the practice increases the tendency to teach the subjects separately. Correlation of subjects is often looked upon with disfavor by special supervisors as being a waste of the time set apart for the special subject. If the project method is advocated at all by the special supervisor, it is not the real project method which would utilize useful subject matter from any field, but a "project" limited to the special subject. The employment of special supervisors is, therefore, wrong in principle because it violates the rule that subject matter from various subjects should be connected and correlated.

The Principal Better Qualified

The principal is in many ways better qualified as a supervisor of his teachers than are special supervisors. It is frequently contended that the principal is not qualified to supervise all subjects. If this is true, he should consider it as part of his professional duty to become so qualified. The disagreement, however, arises as to what is the basic qualification for supervision. It is folly to assume that it is necessary for one to have specialized training in mathematics in order to properly supervise teachers of arithmetic. In fact, the person who has specialized in methods and technique of teaching rather than in subject matter is likely to be the best supervisor of the teaching of immature minds, where learning can best be accomplished through the concreteness that will result from simplifying the material and correlating it with material learned in other subjects and with out-of-school experiences.

The principal has many advantages growing out of his ordinary relationships that tend to make him a better supervisor than the special supervisor. Teachers have almost daily contacts with their principals in other relationships than supervision. A teacher can seldom know the special supervisor in any other relationship than that of his capacity as supervisor or critic. There is, therefore, likely to be more friendly, sympathetic, and cooperative relationships between the principal and teacher than between the supervisor and teacher. These are

extremely important both to the one who supervises and to the one who is supervised.

The principal should supervise his teachers because he must assume responsibility for the work of his school. The best administrative practice would make the principal the responsible head of his school. It is a truism to state that authority must accompany responsibility. No one can be responsible for that over which he exercises little or no authority. Yet it is true that supervisors who are employed for a school system will seldom unqualifiedly recognize the authority of principals of the various schools in which their supervisory work is performed. The supervisor rightly feels a responsibility for the work of his special subject in the entire system, and the principal rightly feels a responsibility for all the work of his school. Friction sometimes develops between the teacher's two superior officers, which is detrimental to the work performed by the teacher, in fact, to all the work of the school. Where there is not an open break between the principal and supervisor, it is frequently due to the fact that the principal feels that harmony is essential and gracefully acquieses to that which, in his judgment, may not be for the best interests of the school. It is not only the development of friction between two superior officers, one working with a feeling of responsibility for the school as a whole, and the other with a feeling of responsibility for a particular subject, that is objectionable. There is the further objection that it is wrong in principle to introduce an official, outside of the direct line of authority, and over whose work the principal can have no authoritative control. Even if there should be no friction between principal and supervisor, the principal, being responsible for all work of his school, should feel free to develop any portion as he thinks best. This the supervisor will not concede since he will feel a necessity for standardizing the special work under his direction in all of the various schools.

Office-Desk Principal Ineffective

4. The principal's work can be so arranged that he will have sufficient time for supervision. The most efficient principals are not the officedesk group. It is not necessary for the principal to be in his office at all hours. He should have regular office hours and a clerk to be in his office at all hours during the school day to answer telephone calls and to receive visiting or business callers. This clerk should know where the principal may be found at all times but should seldom interrupt him in the performance of his supervisory duties. Officials at the central administrative office, parents, teachers, and pupils will soon learn that the principal's time is valuable and will adjust their business and visits to his program.

It may be maintained that a staff of extra clerks for the schools is expensive. It has often been shown that the most expensive practice is to require clerical work of higher salaried principals. Efficient clerks, to make possible the real professional leadership by the principal of his school, are far less expensive than the employment of what would then be a superfluous corps of special supervisors. Real economy dictates that the principal shall not spend his time at clerical work but that it shall be given to professional duties. Since schools exist for the single purpose of educating children, supervision would seem to be the most important of these duties.

5. The employment of general supervisory assistants may be necessary in large schools. By general supervisory assistants is not meant

general supervisors for an entire school system, or even for a number of schools. Obviously that would be but little improvement upon the plan of employing special supervisors. In large schools a general supervisory assistant, possibly in the title of vice-principal, may be employed as an extension of the principal, to take over a part of his supervisory work. Such supervisor, whatever his title, must be employed for work in the one school only and must be, in all respects, subordinate to the principal. As a supervisor he will act under the authority of the principal and in his stead.

#### The Principal's Supervisory Work

While the work of special supervisors must be limited largely to classroom visitation, conferences, etc., the work of the principal may be much broader in scope. While including the work with teachers in methods and technique of teaching, "supervision" under a principal may connote all of the activities in which he engages for the purpose of improving instruction. The planning of demonstration lessons to be given by the principal or other teachers, the supplying of substitute teachers in order to provide opportunity for mutual visitation among teachers, the placement of children in proper grades, the provision for special groups, the use of standardized tests as the basis of remedial instruction, provisions for teachers' meetings, even the helping of teachers with problems of discipline, may all be a part of the principal's supervisory program. The principal will not, however, neglect the important supervisory duties of classroom visitation and teacher conference.

As a supervisor the principal supervises the work of his school:

- 1. To help his teachers to define their aims and objectives;
- 2. To improve the methods and technique of teaching employed by his teachers;
- 3. To help his teachers economize the time of their classes;
- 4. To help his teachers secure learning activity from pupils rather than to try to learn for them;
- 5. To help teachers plan their work for the school year and sometimes even to help in planning daily lessons;
- 6. To inspire teachers with confidence in their ability to teach or learn to teach;
- 7. To help his teachers to have attitudes of experimentors in methods and technique of teaching;
- 8. To improve the organization, program, curriculum, etc., of his school. There is no way he can do this successfully except as he sees them in operation;
- 9. To differentiate pupils into groups of approximately equal ability and help plan, for the groups, appropriate courses;
- To place each teacher in the place where her work will be most effective.

#### Principles of Supervision

As a classroom supervisor, the principal must visit the teacher at work, not for one minute or five minutes, but for an entire period, or a day, or even a week. He must go to the classroom, not as an inspector or critic, but as a humble student of education, eager to help the teacher and to learn from her. His technique of supervision will change as he learns more about his work with increased experience. He will, however, have a few guiding principles to follow which seem to him to be sound. Some such principles may be as follows:

- 1. He will enter a classroom quietly and unobtrusively and frequently enough so that teachers and pupils will be used to his presence.
- 2. He will have regular hours for the work of supervision, but the amount of time he spends with different teachers will vary according to their need.

- 3. He will not attempt to observe the poorest, but rather the best, work of his teachers.
- 4. He will be sympathetic both in observation and in conference.
- 5. He will not offer criticism unless he has constructive suggestions for improvement.
- 6. His attitude will be positive, not negative; his criticisms will take the form of suggestions for improvement rather than fault-finding.
- 7. He will give a reasonable amount of commendation.
- 8. He will, through his encouraging influence, be a welcome visitor to the classroom and his attitude will not flustrate teachers and pupils but rather encourage them to do their best work.
- 9. He will, above all, win the teacher's confidence so that she may feel that he is a friend interested in her success.
- 10. He will give personal help to the teacher in lesson planning, improvement of her methods of conducting classwork, the making of assignments, planning the use of time, etc.
- 11. He will give the teacher the benefit of his suggestions by means of individual and group conferences and typewritten constructive criticisms. The conferences will not be lectures, but real conversational conferences, and will consist of contributions by teachers as well as the principal. Teachers will ask questions and contribute answers and illustrations from their experience.

#### Standards vs. Criticisms

- 12. He will have definite standards for judging the work of a class but will not criticize too many points at one time. He will often find it effective to make a statement of the points to be observed at a particular time so that the teacher may plan her work with particular attention to the immediate supervisory plan.
- 13. He will be a diagnostician of classroom teaching and will prescribe remedies according to difficulties. Poor work, for example, may be due to lack of enthusiasm, lack of personality,

- lack of interest, lack of sympathy, poor health, worry, or many other causes, as well as to poor methods, poor discipline, or unsuitable subject matter. Obviously these causes require different remedies, if they are at all remedial. It is the principal's duty as supervisor to find and improve the weak spots in his school.
- 14. He will not impose his methods upon the teacher. She must be the judge of the effectiveness of methods for her work and be free to use her own, but the principal will encourage her to experiment with others. The attitude of the principal will be, "We are learners together."
- 15. He will go about his work systematically. He will analyze and attempt to correct one thing at a time. His criticisms will not be general, but specific. He will not say "That was (or was not) a good lesson," but "The class was interested in the ten-minute discussion of 'fire'," or "There was loss of attention when the Latin translations exceeded one minute in length"
- 16. He will give criticisms only that are based upon sound principles of education rather than on mere opinion or authority. He will convince the teacher by demonstration, or experiment on her part, realizing that criticism without conviction of the teacher is fruitless. He will always be open to conviction himself.

Now all this calls for a principal trained as a supervisor; one who has a good foundation in principles of education and methods of technique of teaching. Advanced professional training, the reading of professional literature in these fields, and his own experience will all be invaluable in such work.

#### A Program for Principals

A general supervisory program of a principal may be somewhat as follows:

- 1. He will carefully analyze his duties and budget his time. Many administrative and clerical duties will be turned over to others.
  - 2. He will post a notice that his office hours (Continued on Page 138)



INTERIOR OF THE FIRST SCHOOL AT CLEVELAND, OHIO. ERECTED IN 1802.

The illustration above is reproduced through the courtesy of Mr. George M. Hopkinson, architect of the Cleveland board of education, and is an attempt to reproduce as accurately as possible the first school erected in Cleveland in 1802.

in 1802.

Cleveland's original school was a log cabin erected by Lorenzo Carter, an early settler, and given by him to the community for school use. Superintendents who attend the meeting of the Department of Superintendence will have an opportunity of seeing how far Cleveland has advanced from this rather bare room with crude wooden benches, a wooden desk against the wall, an open fireplace, an hour clock, quill pens, etc.

# Little But Important Things Often Forgotten in Schoolhouse Planning

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Administrative Offices

In discussing the administrative offices, I think it will be well to consider the offices for a large high school. The reader may then readily eliminate such items as are not applicable to the smaller school:

Public Space and General Office:

A counter with storage space underneath for files and filing system.
A teacher's letter box.

A master-clock program system, with a home station for intercommunicating telephones and outside telephones.

Washbasins.
A clothing cabinet for the occupants of the room. Public pay-telephones for the use of students. Principal's Office:

Office for dean of girls. Office for dean of boys. Continuation-school principal's office. Principal's secretary. Girls' restroom.

Toilet accommodations. Toilet accommodations for officials of the school. Women teachers' retiring room.

Men teachers' retiring room. Medical room.

Coatroom for men and women teachers. Program clock and buzzers, fire-alarm system ith annunciator in the general office.

Toilet rooms for men and women teachers.

Sometimes it is desirable that an attendance officer's room should be provided with a counter, and the counter treated the same as in the gen-

eral office. Radio equipment with a master station in or

near the principal's office, and loud-speakers in the several rooms, including the classrooms, is not very successful today, but is highly desirable. Wires should be run to the classrooms so that the equipment may be installed at some future date when the system is inexpensive and demonstrably successful.

The offices for the heads of departments in a large high school should be planned on the basis of at least one office for every five teachers.

Laboratories

There is such a variety of laboratories and there are so many items to plan for that I shall not attempt to cover all the points in this paper. Only the essentials can here be outlined. First, it is essential to establish the size of each room by the proposed pupil capacity of each type of laboratory, and then to fix the number of the laboratories by the pupil capacity of the school. The next step should be that of establishing the size of the tables and the types to be used.

Let us take the physics laboratory first: Physics is generally a fourth-year subject in secondary schools, and as a rule, the enrollment in the fourth year is a little less than that of the other years. The room size cannot be determined until the table size is determined, and whether the pupils shall work both sides of the tables or on one side only.

In all the laboratories, it is essential not to forget gas, electricity, water, compressed air, and vacuum arrangements. The last two items are not always included in high-school laboratory equipment, but it is well to remember that some high schools, embracing junior-college work, will require them. Motor generator sets are necessary to develop direct current from the alternating current. Ample storage space is a requirement, as equipment of the laboratory will grow as time advances. In order not to interfere with experiments, all gas and electric outlets should be at the sides or backs of the tables, to suit each case.

Should an instructor's table be provided? Some believe this space should be conserved, others that it is necessary for the instructor to have a table, as well as a small workshop, where

he can make repairs.

Permanent Laboratory Fittings
Shall there be a picture screen at the end of the room, and electric receptacles for moving pictures and projectoscope machines at the other end?

An item often forgotten but of much value is the wall table, extending along the length of the room adjacent to the windows. This wall table should be attached directly to the wall of the building so that it may be used for balance or scale work, thus minimizing vibrations. This wall table, I think, should go into all laboratories, such as physics, chemistry, general science, biology, zoology, etc., for it provides splendid working space where the best possible light can be had.

Wall cabinets should be provided in each laboratory, also cabinets for binders, apparatus, and instruments. Bulletin boards are essential. In the physics laboratory, may I say, the switchboard must not be forgotten. It is highly desirable that the switchboard be placed where it will control all the feeders to the other laboratories. It is often a good plan to so place the switchboard that the arrangement of the bus-bar work in the back of the board may be observable by the students in order that they may understand better the principles of electricity and the equipment necessary for the electric work.

#### The Chemistry Laboratory

The size of the room for chemistry is determined by the number of sections and the number of students in each section. Let me cite an example. The width of a chemistry laboratory should be divided as follows:

Window wall table			
and student's table	 	 	. 3 f
Student's table			
Passage	 	 	. 3 f
Depth of cabinets			
Total	 	 	.22 f

The cabinets may be reduced to 1 ft. 6 in., allowing an additional 6 in, for the passage and the working space under the windows. A single table, 12 ft. long, provides 3 ft. of working space for four stations, or four pupils, on each side of the table, or 8 in all. The capacity of the room is then determined by the number of the

The drawer space under the students' table tops at each station should provide for six separate drawers, caring for six sections at each In front of the space occupied pupil-station. by the sink, there should be a cupboard and a common drawer. Thus, any high-school chemistry-laboratory table has capacity at each station to care for one pupil at each of the six stations, or 48 in all.

From the dimensions given, it is easy to see that, if the room is 3 ft. wider, each table can care for two additional stations, or each table then will provide for ten stations.

The points mentioned here are often forgotten or overlooked, because many school authorities are prone to rely on laboratory manufacturers' catalogs for the equipment of their chemistry laboratories. There is danger that the laboratories will be inadequate to meet the needs unless some such principle of determining student-table capacity as outlined is followed.

In establishing the design and arrangement of the laboratory table, it must be borne in mind that the college-chemistry table is entirely different. Larger storage space is required by the college student, and a different scheme must be evolved to take care of this necessity.

It is possible to overload the chemistry laboratory with electrical equipment. I believe that chemistry laboratory tables are adequately equipped, if there are d.c. and a.c. current outlets at the ends of each table, and possible at the center. Outlets are not needed at each

There should be gas and water at each pupil

A picture screen should be provided, and a receptacle to operate the projectorscope or lantern should be arranged.

A reagent cabinet for each table should be built into the wall opposite the windows. Fume hoods, mechanically ventilated, are necessary. Cabinets for binders, bulletin boards, etc., are a part of the equipment.

Single corridor doors at each end of the aboratory should be provided so that incoming students may enter by one door while outgoing students use the other. Special mechanical ventilation is necessary for this laboratory and for the lecture room.

#### General-Science and Biology Laboratories

What has been said regarding the physics laboratory is applicable to the general-science and biology laboratories, with the exception that the general-science laboratory should have adequate provision for the microscopes in the way of dustproof cabinets. All cabinets should be equipped with adjustable shelves.

General-science laboratories are often overloaded with plumbing. Four or five sinks are ample, if properly located to be easily accessible to the students.

I shall not make mention of the menagerie, aquarium, or sand tables in these rooms, because they are matters which are governed by the instructor in charge of the work. But, there is one important question which should be considered: Should space be allowed for movable tablet-arm chairs placed in the front of the room, between the instructor's table and the students' fixed tables, in order to bring a class together quickly for instruction on matters concerning experiments? Personally, I feel that this is unnecessary in chemistry and physics; however, others hold the opposite view, and perhaps rightly according to their methods of instruction.

Provision must be made for keeping plants and animals which are under observation in the laboratories. The animals must be placed where they do not become objectionable.

Just how far to go in planning a conservatory is problematical and depends entirely upon the situation within the school itself. The problem should be thought of in the preparation of the drawings so that, if the school is not prepared to have a conservatory built immediately, provision is made for it when the school curriculum is enriched.

#### The Science-Lecture Rooms

In the science-lecture rooms, complete equipment for the instructor's tables is desirable. So, too, provision must be made for darkening the rooms. Special ventilation should be provided in the lecture rooms to take care of fumes. This is particularly necessary in the chemistry and premedical-science rooms.

Lantern screens, a receptacle for the lantern, blackboard space, and a fume hood near the instructor's table, are essentials in lecture rooms. Sight lines from the students' seats to the top of the instructor's table, must be established. Just placing an elevated platform without determining sight lines, is likely to cause students to miss many phenomena of the experiments.

Finally, space is needed for the offices of the instructors and for the science library.

This paper has reached such length that I hesitate to enter into a discussion regarding little but important things pertaining to the library, commercial, drawing, industrial-arts, home-economics, and cafeteria departments of the school. There are, however, some few statements that should follow and I am recording them as they come to mind.

#### The Problem of Natural Lighting

One very striking error in designing school buildings is to work out a plan and an elevation that seem to be acceptable and to go on with the preliminary studies, without checking the ratio of the glass area to the floor area After a number of hard experiences we make it a rule to check glass- and floor-area ratios immediately after we have arrived at an advanced point in the study of the preliminary drawings.

While discussing this matter, may I add that I am skeptical about the hard-and-fast rule which requires that the glass area shall be equivalent to 20 per cent of the floor area. Many rooms are adequately illuminated if the glass area equals 18 per cent of the floor area. Again, the problems of masonry mullions is very important. Some authorities who check plans officially are prone to consider a mullion 13 or 17 in, wide or wider very injurious to the lighting of a schoolroom. Close observation discloses this to be a fallacy, because the rays of light enter the schoolroom through an arc. whose magnitude is close to 170 degrees. As a rule, the apex of the penumbra of the shadow of the pier falls several inches away from the desks, but even though it should not fall away from the desks but rather touch upon the first row of desks, very little if any harm is done to the illumination at that point. I offer this statement as a matter for discussion and in the interest of good architecture.

The window is the unit of scale and the unit of design of any building, and I know of nothing that has contributed more to make school buildings hideous, than great banks of windows, with thin mullions which cause the unit of scale to overwhelm the building as a whole. These banks of windows are conducive to factorylike architecture.

#### The Problem of Vertical Circulation

This problem is before the country and I feel that it is well worth discussing. We have been thinking of stairways in terms of safety alone, but vertical circulation is quite as important, especially in the junior and senior high schools and elementary platoon schools in which, between periods, the pupils are changing from room to room and from floor to floor.

Now, when the pupils descending and those ascending use the same single stairway, there is confusion, and progress is impeded. In the large school, it is highly desirable to have double stairways in the same stairway well, so that those descending may take the right, and those ascending take the stairs on the left. As a substitute for this, some school administrators make use of stair wells located far apart, but this I have found to be decidedly inconvenient, and to cause administrative hardships.

#### Balustrades and Handrails

The proper height of handrails and balustrades is a matter easily forgotten and overlooked, yet of extreme importance. A few years ago, I was in a school building in the process of construction, and I found that the handrails on the balustrades were about 4 ft. 6 in. above the tread nosing, and no provision had been made for a wall handrail. This meant that pupils using that stairs had no means of guiding their steps when descending and no handrail means of assistance in climbing the stairs.

Handrails should be provided on both balustrade and wall sides of the stair well, projecting not more than 3 in. with the center line of the rail placed approximately 30 to 31 in. above the forward edges of the treads. In elementary schools, the risers should not be more than 6 in., and the treads, including the nosings, should measure 11 in. In high schools, the risers may be as much as 7 in., but no more, and it is better if they are 6 in. Again, the treads should not be less than 11 in. wide. In fact, the rule regarding treads and risers is that the sum of the two shall equal from 17 to 171/2 in.

One especially important matter is that of checking the drawings and specifications. Observe how they compare and fit together. All this should be done before the bids are requested; it is extremely important. Checking very often is left until the time when the bidders are figuring the work; this I believe to be too late.

#### The Sanitary Equipment

The question of drinking fountains, hose reels, hose bibbs, urinals, and water closets not only should be established when the preliminary floor plans are fairly well along, but the location and number of these utilities should be checked repeatedly. Draftsmen are quite human—more so than architects—and errors are bound to occur which will incapacitate a school. A regulation regarding the number of toilet-room fixtures has been recently issued by the Department of Public Instruction, Bureau of Buildings, of the State of Pennsylvania. I believe it very well fits the requirements:

Girls' toilets—In schools of 6 classrooms or less,

Girls' toilets—In schools of 6 classrooms or less, arrange 1.0 closet bowl per classroom; in schools of more than 6 classrooms, provide 0.8 bowls per classroom.

Boys' toilets—In schools of 6 classrooms or less, 0.5 closet bowls and 0.75 urinals per classroom; in buildings of more than 6 classrooms, 0.4 closet bowls and 0.6 urinals per classroom.

We have found after years of observation, that the floor-standing urinal is very difficult to set with a satisfactory floor finish at the lip, regardless of the floor material, and as time goes on, the connections between the lip and the floor become insanitary and unsightly. We recommend the extended-lip wall urinal, set above the floor. With sanitation again in mind, we use only the extended-lip water closet, with the sanitary open seat for boys and girls. The vertical-jet drinking fountain is also tabooed; the parabolic stream of water is more desirable.

It is necessary, of course, that drinking fountains be placed in the play yards—one or more fountains for the boys, and the same for the girls. Instead of simply locating the drinking fountains and calling the job complete, the fountains and the space around them should be architecturally treated so that the pupils do not get the impression of drinking from a trough. All this can be worked in with the architecture of the building and the treatment of the grounds, and in my judgment is essential for good school planning and architecture.

Generally, there should be two or more drinking fountains on each floor. This depends, of course, upon the size of the school. Drinking fountains are recessed into the corridor walls in order to avoid injury to pupils. In the same recess, are placed the fire-hose-reel cabinets and the fire-alarm gongs. We connect the supply line of the drinking fountains with the supply line of the hose reels as a telltale of the water supply in the hose line.

#### Toilet Rooms

It is necessary to place toilet rooms on each floor of school buildings which are two or more stories high. This is especially true for high schools. In addition to the Pennsylvania standGERWIG RETIRES FROM PITTSBURGH SECRETARYSHIP

Dr. George W. Gerwig, for 37 years secretary of the Pittsburgh, Pa., board of education, retired from office early this year. With his retirement there is removed from the school secretarial field of the United States one of its most interesting figures.



DR. GEORGE W. GERWIG

Dr. Gerwig is primarily a man of distinguished presence. He is refined in manner and speech, and of idealistic impulse. He has differed from others in the same calling in that he frequently in speech and the printed page has voiced his conception of American citizenship and the cause of popular education. Some of his writings are modern classics.

Dr. Gerwig was appointed secretary of the board of education of Allegheny, Pa., in 1892, and in 1911 was appointed secretary of the Pittsburgh board. He was active as a reorganizer of the Pittsburgh schools and was in charge of the government census for the Pittsburgh district in 1910. He is trustee of the Frick Educational Commission and a member of the National Association of School Business Officials. He is also the author of numerous short stories.

Dr. Gerwig is a graduate of the University of Nebraska, the University of Chicago, and the University of Pittsburgh, and holds degrees given by these institutions.

Dr. Gerwig is succeeded by Mr. H. W. Cramblet, who was assistant secretary of the board for the past ten years. Mr. Cramblet is a graduate of Bethany College and completed his postgraduate work at Yale University. He was principal of a high school in Pennsylvania prior to accepting the position of assistant secretary of the board. The appointment carries with it an initial salary of \$6,000, which is an increase of \$2,000 over the salary he received as assistant secretary.

ards quoted previously, a rule of thumb might be applied by providing one water closet for each 40 girls, one water closet for each 60 boys, and one urinal for each 40 to 50 boys. Here again, it is worthy of mention that in a small school, the rule does not serve and judgment must be exercised.

We find that two lavatories in the boys' toilet room are quite sufficient. In the girls' toilets, this is a matter again of judgment, depending upon the school. In the small school, two lavatories are generally sufficient; in a large school,

(Concluded on Page 144)

# The Actual Clerical Work in High Schools

Edward A. Fitzpatrick<sup>1</sup>

There was considered in the first article in this series2 a factor usually neglected in administrative studies, the feelings and attitudes of those who do the day-to-day work. These conditions are the whole problem. They may seem irrational; they may be without adequate basis. They cannot be dismissed; they must be dealt with. They will receive further attention in the third article of the series

In this article there will be considered certain facts about clerical work in the same school system which was studied in the first article.

Wide Variation in Time in Making Same Report—The most striking general fact about the clerical work in the high school in the system under study, is the variation among schools in the amount of time it takes to make the same report, even allowing for differences in size and register of schools, or other variable factors in the problem itself. This difference may be two, three, or four times as great in one school as in another, and even greater. An interesting further aspect of this fact is that the same report or form is prepared in one school by teachers, in other schools by clerks, and in still other schools in varying proportion by teachers, students, and clerks.

Records Initiated by Central Office or Indiridual Schools-In the city under study it was charged generally that the central office of the school system was responsible for the overwhelming burden of reports, and it seemed to the teachers hopeless to change it. The fact was that most of the clerical work originated in the individual schools, was carried on in the school as it was by tradition, or in accordance with the ideas or idiosyncrasies of the present administration, and that it was different in different schools. Wide variation existed in the forms used, in the method of preparation of reports, and in the collection of material.

It was true that while the reports required by the central office were not excessive, they might be simplified. This applies particularly to a number of items in the reports which are not used for any purpose whatever at present. Inertia is too great to take them out, or to revise the form.

Fact Basis for Teachers' Feelings-The feeling of the teachers that reports are demanded on very short notice, which interfered with classwork, if the teacher had no study or free period, or interfered with the free use of study periods to see pupils, or do other essential schoolwork. and that information frequently requested was already available to administrative authorities. had considerable basis in fact. An even larger basis in fact was found for the teacher's feeling that she did not ever see what the reason for the report, nor did she ever learn that it had any use. She found out frequently, in this way that it made no practical difference so far as she was concerned, whether she guessed or estimated the data, instead of accurately determining it. There can be no doubt that these attitudes and facts, and similar ones quoted in the first article, are an adverse factor in teacher morale.

Elements Entering Into a Standard-In this school system, clerks were allotted to the high schools on the basis of one clerk for each seven hundred students on register. This practical standard was generally regarded as inadequate. How complicated the problem really was may be indicated by the factors that should have been considered in addition to the mere number of students on register. Some of these factors are

brought about by an extraordinary increase in enrollment, or by a physical plant inadequate to the situation so that annexes had to be made ill-adapted elementary school buildings, double sessions had to be organized, with student bodies larger than the school was planned for in the beginning, and the like. At any rate, some of the factors in the situation to be taken into account in the allotting of clerical assistance are:

1. Register of Schools

The more students there are, the more records there are to make.

The overhead for the first thousand or for the first thirty classes, and the effect of succeeding increments have not been studied.

The necessity for communication between principal and department heads and teachers, and the necessity of keeping currently informed of what is happening in annexes, is a factor. This varies greatly in schools.

3. Variety of Courses

Variety of Courses For a single course records could be easily standardized, but when free election is permitted, and where there is a variety of courses, the amount and character of the clerical service is increased. Double Sessions

Double sessions have very much the same effect as annexes.

5. The Character of the School Organization A centralized organization will have a different requirement from a decentralized organization and this is important in its effects on the amount of clerical work required of teachers.

Reports Required
The reports required by the board of education The reports required by the board of education (headquarters) are not a major factor in the problem. There should be a detailed study of the internal demands of each school by virtue of the nature of its organization by departments, or by officers, and this study should be brought before the high-school principals for comparison.

7. The Character of the Forms Used
The make-up, printing, size, and color of forms are factors in increasing or lightening the clerical load

Character of School Population

Size of Individual Departments

The increase in administrative and clerical work in a department of five members mounts rapidly when the number of members becomes twenty or twenty-five or more, unless there is centralization

And there are factors which growing school systems must watch, whatever their present

The Principal and Clerical Work-The principal of one of the schools signed himself "chief clerk." This may be humor or despair, but in any case, it raises a significant problem in connection with clerical work, namely, that highly paid supervisory and administrative officers are spending their time on clerical duties that a clerk at one third, or one fourth, or one fifth of the salary could do very easily and more efficiently. In any case, for a principal to feel that he is merely a chief clerk indicates two things, either that he has not an adequate conception of his job, or that he does not realize that the power to change the condition is in his own hands, for after all, he is master of his fate. He ought to be the thinker, the planner, and the master mind in the organization, and he ought to have time to think.

The Heads of Departments and Clerical Work The same situation applies to the heads of departments in the high schools. It was a general complaint, and it was found to be a fact, that many first assistants were overburdened with clerical work, to the neglect of the constructive service which was their duty and their opportunity. They were doing ordinary clerical work, instead of visiting classes, conferring with the teacher about such visits, studying the needs of the department and the policies it should pursue, preparing special and general courses, and other educational activities.



WM. J. COOPER New United States Commissioner

WM. J. COOPER

New United States Commissioner of Education.

For months there has been speculation as to who would be chosen United States Commissioner of Education to succeed Dr. J. J. Tigert. It was believed that the Administration at Washington was casting about for the biggest man it could find, who would be willing to accept the position. Here it also became clear that high-class educators were not easy to get. Such men are usually already well placed and are not inclined to consider a change.

The man appointed to this important position by President Coolidge is Mr. William J. Cooper, for the past two years state superintendent of public instruction for California. Mr. Cooper's career has had a somewhat rapid rise. He had been superintendent of schools at Fresno for five years, and after a few months' service in the same capacity at San Diego, he was chosen state superintendent.

Mr. Cooper had won a reputation in California as an exceptionally skilful school administrator, when he was chosen state superintendent. His contemporaries conceded his capacity for leadership and his elevation to the high position met with popular approval. He is a graduate of the University of California, and holds two degrees given by that institution.

Mr. Cooper will come to the office of United States Commissioner of Education with abundant equipment as a schoolmaster and administrator. He will bring with him something of the energy and progressiveness of the West, and in all probability, will prove himself a new type of educational leader whom the rank and file will gladly follow.

The heads of the English department made self-study of the problem of their duties, and indicated a number of things that stood in the way of their rendering the highest educational service to the children in the schools. The list of duties indicates the nature of the problem. As prepared by a remarkable head of a department in this city, the list is prefaced by the following statement: "From the analysis which is attached, it will be observed that the following duties could be discharged more accurately and satisfactorily by a clerk than by one without special clerical training"

Drawing up tabulations of marks to ascertain

progress.
(The chairman needs these tabulations study the effectiveness of teachers and the various kinds of tests and examinations, but he should not be obliged to waste time in gathering all the partial reports and reducing them to order.)

Tabulating records of size of classes, pupil-period loads; organization of department each

(All these records are necessary to plan new every semester the programs of the anew every semester the teachers in the department.

Summarizing grades in four classes, 59-64, 65-74, 75-89, 90-100, in a) Daily, uniform examination, and final marks.

b) State examinations.

(These reports, laborious to prepare, are needed by the principal.)

Typing departmental meeting reports.

(The principal needs these, but a clerk can

e them much better than a chairman.)

- Mimeographing. a) Syllabi, uniform and model lessons (frequent and essential).
- b) Uniform and conditional examinations (once every term).
- Minimal requirements and special material. Notices and programs for departmental
- conferences. Circulars of instruction for

  1) Special work in the department.

Special projects of the principal. them. (Concluded on Page 147)

<sup>&</sup>lt;sup>1</sup>Dr. Fitzpatrick is Dean of the Graduate School of larquette University and Chancellor of Mount Mary ollege for Women, Milwaukee, Wisconsin.

<sup>2</sup>December, 1928, p. 57.

# The Progress of Standard Schools in Cleveland

George M. Hopkinson, Architect of the Board of Education, Cleveland, Ohio

The board of education of Cleveland, Ohio, has recently completed the first four buildings constructed according to standard plans, prepared at the suggestion of Mr. Rees R. Davis, vice-president of the board of education. Three of the four buildings are elementary schools of 31 rooms each. The fourth is the Alexander Hamilton, a junior high school accommodating 1,278 to 1,600 pupils. Another building project under way is the John Hay Senior High School in the University Circle.

There are 144 school buildings in the city of Cleveland, representing all types of construction, some of them dating back to pre-Civil War days.

The new standard plans call for a building adequate for modern educational needs, flexible in design for later modification to meet new ideas, and durable for long and continued use. These are advantages and economies of the first order, but a still greater economy has been made in architectural costs since, when the board of education needs additional buildings, it need merely go to the files in the office of the school architect, find the plans and specifications, and approve such modifications as may be required in the foundations. A further economy will accrue to the board since it has been possible for contractors to bid on two or three buildings at once. The purchase of materials in large quantities for all jobs means an economy which is passed on to the board of education.

The new standard elementary buildings are of a modified Colonial architectural design. The standard junior high school, of which the Alexander Hamilton is the first, shows Gothic influence. Minor and inexpensive variations in embellishments and materials have resulted in giving each of the three elementary buildings an individual appearance. No standard plan has been adopted as yet for senior high schools, since these schools are built infrequently, and are so large that they dominate the surroundings and must be individually planned.

The three elementary buildings erected on the standard plan show a saving of \$392,057 over three buildings previously erected, with

practically the same number of rooms and pupil capacity in spite of the higher unit cost per cubic foot at the present time.

An inspection of the completed buildings has proved conclusively that there is no waste in materials, that the materials will last during the lifetime of the building, and that the maintenance and operation costs during future years will be less per unit than in any school building previously erected in Cleveland.

The heating and ventilating systems in the standard schools are of the split system type, steam being furnished to radiators in each room. Warm air is distributed to each room by central fans. The ventilating system, known as the sanitary duct system, which distributes all the air over a central point, known as a plenum chamber, under the first floor, has been installed. All of the work is in accordance with the requirements of the state law. Throughout the buildings, horizontal ducts have been omitted, and only vertical duets leading to each room have been installed, both the exhaust and supply, making the system as sanitary as possible.

The plumbing embraces the most sanitary of fixtures; the piping is carried out in accordance with local sanitary requirements. All toilets have marble wainscoting and partitions for the reason that this eliminates a good deal of the maintenance cost. Marble is used in preference to either metal or wood, as experience in Cleveland shows that, while the initial cost is greater, the upkeep is so much less that it is highly economical in the long run. All the corridors have floors of quarry tile which will last through the lifetime of the building without replacement or repair.

Wood floors are used in all classrooms in the standard schools. These floors are preferred by the school architect and will endure hard usage for at least thirty years. They are considered superior in the long run.

The lighting fixtures are of a standard type adopted in 1921, upon the recommendation of Prof. H. D. Bates of the Case School of Applied Science. The present fixtures, while free from

ornamentation, are quite easy to clean, which becomes an important factor in schoolhouses. They are closed at the top so that they do not act as dust collectors. Experience in Cleveland has shown the desirability of installing acoustical treatment on the ceilings of auditoriums, gymnasiums, and music rooms. Materials used to date consist mainly of felt, covered with canvas. Many of the Cleveland schools are now experimenting with acoustical plaster and such materials as celotex.

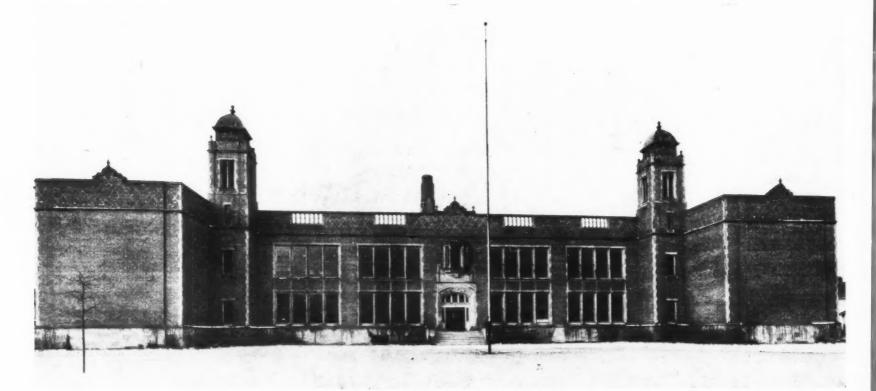
It is planned to receive bids for an additional standard building to consist of 21 rooms. This standard will be used in neighborhoods too small to justify a 31-room building.

A substantial saving in the design and construction of these new buildings has resulted from careful studies made preliminary to the design of projected junior-high-school buildings. An analysis of the requirements for junior high schools provides for a building three stories in height, with a center wing for the auditorium and gymnasium, and having a pupil capacity of 1,278 to 1,600 pupils. The gymnasium is on the ground floor, on a level with the locker and shower rooms, while the auditorium is level with the first floor of the building and the balcony with the second floor.

In the junior-high-school buildings, the three floors are laid out on simple, straightforward lines, with one single-length corridor along the front. The classrooms, shops, and auditoriums are entered from this corridor. The staircases are at each end of the corridor, with two additional ones at intermediate points along the front of the building.

The materials of construction are similar to those used in the three standard elementary buildings. The saving in the Alexander Hamilton, over the cost of the Thomas Jefferson Junior High School, the last previously erected, will amount to approximately \$134,000. cost per pupil amounts to \$560 in the Alexander Hamilton Junior High School, and \$665 in the case of the Thomas Jefferson Junior High

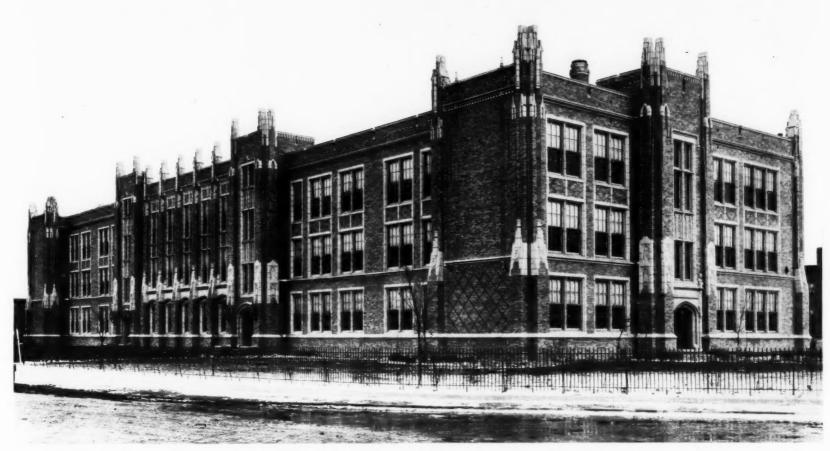
The experience of the Cleveland school



HENRY W. LONGFELLOW ELEMENTARY SCHOOL, CLEVELAND, OHIO

Wm. R. McCornack, Architect, Cleveland, Ohio

nce neighborhood where ample grounds are available, and where a two-story building does not become excessive in cost in relation This building is erected in an outlying residence neighborhood whe



ALEXANDER HAMILTON JUNIOR HIGH SCHOOL, CLEVELAND, OHIO

George M. Hopkinson, Architect, Cleveland, Ohio

The Alexander Hamilton Junior High School is the standard type of junior high school. The exterior has been worked out in very simple Gothic form. The interior conforms in every way to the standards set up for elementary schools. A detail of the entrance and stair tower of this building will be found on the cover.

authorities goes to show that comparisons of order to make the comparisons of any value, erected, the permanent or temporary character

costs of school construction in the cities of the they must take into consideration the materials of the structure, and the maintenance and op-United States are quite often misleading. In used, the climate in which the building is eration costs involved.



WILLIAM RAINEY HARPER ELEMENTARY SCHOOL, CLEVELAND, OHIO

George M. Hopkinson, Architect, Cleveland, Ohio

This is the standard three-story type of building adopted for present construction by the Cleveland board of education. It contains no basement, except for necessary space used for heating and ventilating apparatus. It is fireproof throughout, and contains nothing but standard arrangements and equipment. The exterior has been carefully studied for dignity and for economy in the use of materials.



INTERIOR VIEWS OF CLEVELAND, OHIO, SCHOOLS

Top Left: A TYPICAL COOKING LABORATORY IN A JUNIOR HIGH SCHOOL. It will be noted that the arrangement provides for unit-kitchen groups so that students may work under conditions approximating home situations. The rooms have top as well as side lighting, and a hood is provided over each group of stoves to carry off the gas fumes and the odors of cooking.

Upper Right: THE CAFETERIA IN THE COLLINWOOD HIGH SCHOOL. This room is located on the top floor of the building in the most distant wing. It has top light as well as side light, and every precaution has been taken to remove odors. The tables have oak tops; the floor is maple; the wall and ceiling ornamentation is in keeping with the general style of architecture of the building. A glass partition separates the dining room proper from the serving counter, seen in the rear. This partition has a double value in that it keeps out considerable noise from the dining room proper, and makes it possible for the latter to be used for study and other school purposes without interfering with the work of the preparation of meals and clearing away after meals have been served.

Middle Left: A TYPICAL CLASSROOM FOR GRADES ONE TO SIX. The floor is of hard maple, the walls and ceiling are plastered, and the woodwork is of simple oak or ash. The furniture is movable and ample space is provided for storing teaching materials and books. Tack board is provided above the blackboards.

Middle Right: SHEET METAL SHOP IN A JUNIOR HIGH SCHOOL. This is typical of the elementary metalworking shops.

Bottom Left: A TYPICAL LIBRARY IN A HIGH SCHOOL. The library rooms in Cleveland are furnished like standard classrooms, except that the floors are usually of the rubber-tile type for the sake of quiet. Furniture is of the best standard library type, and considerable attention is given to the beautification of the rooms.

Bottom Right: A TYPICAL KINDERGARTEN ROOM. Careful attention has been given to avoid frills and to make the kindergarten attractive as well as widely useful,



PAINTED POST HIGH SCHOOL, PAINTED POST, N. Y. Palmer Rogers, Architect, New York, N. Y.

Erected in 1925. The central structure, containing the auditorium and gymnasium, is used for both community and school purposes. The left wing, not seen here, is the old building now used as a grade school. The new wing at the right is the high school.

# THE NEW HIGH SCHOOL AT PAINTED POST, NEW YORK A School That Fits Its Community Ruth Clingan Rogers

Painted Post sounds as if it should be the name of a trading post in the wildest part of the early west. On the contrary, it is a dignified and delightful old colonial village in the western part of the State of New York. In early days, Indian tribes used to come in their canoes down the Cohocton and Tioga rivers to the place where these two streams converge to form the Chemung river. At this juncture the Indians set up a sacred, painted totem pole around which they held councils and performed religious rites. The white man called the totem pole "painted post." Hence the name of the

colonial village which grew up at this point.

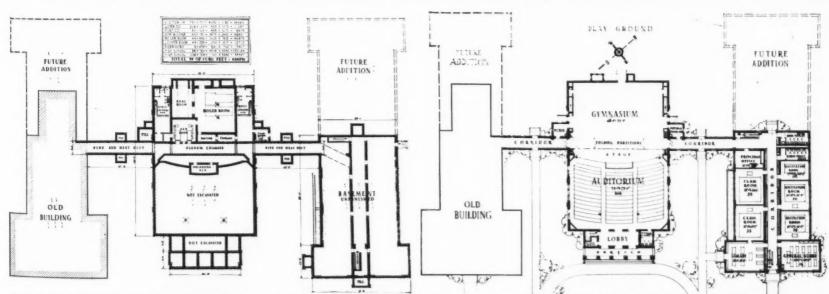
In spite of its lovely old traditions, the town of Painted Post is not content to live in the past but is wide awake and active. It has recently given proof of its progressive spirit by erecting a fine modern school.

Before planning the new building a careful study was made of the school requirements and of the particular needs of the Painted Post community. This survey brought out several points which determined the policy of the board of education and the architect in planning the building.

In the first place, it was found that the old building already on the site could be remodeled to serve as the grade school. The work on this building included the installation of a modern system of plumbing, heating, ventilation. The new high school was then planned with a central unit and one large wing designed to balance the old building.

The central unit, containing the auditorium and gymnasium, was planned as a separate structure so that it could be used without interfering with schoolwork. This answered the need of the village for a large public meeting place and community center. The wisdom of this policy is shown by the fact that the building is now used nearly every evening for some school or community purpose.

Due to the fact that Painted Post had just won the state championship in basketball, there was a demand for adequate gymnasium facilities and for an exceptionally large seating

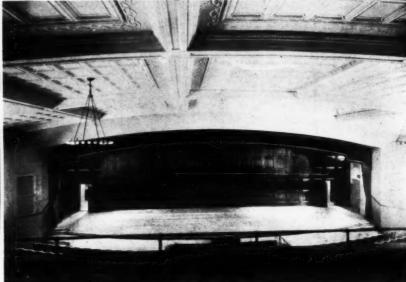


BASEMENT FLOOR PLAN, PAINTED POST HIGH SCHOOL, PAINTED POST, N. Y. Palmer Rogers, Architect, New York, N. Y.

GROUND FLOOR PLAN, PAINTED POST HIGH SCHOOL, PAINTED POST, N. Y. Palmer Rogers, Architect, New York, N. Y.



GYMNASIUM WITH PARTITIONS CLOSED, PAINTED POST HIGH SCHOOL,
PAINTED POST, N. Y.
Palmer Rogers, Architect, New York, N. Y.
The gymnasium is well equipped for the required physical education, and also has a regulation size basketball court and indoor baseball diamond.



AUDITORIUM STAGE, PAINTED POST HIGH SCHOOL, PAINTED POST, N. Y.
Palmer Rogers, Architect, New York, N. Y.
Illustration shows stage as it appears when the mahogany partitions are closed.
This gives an adequate stage for ordinary speaking and assembly purposes.

capacity. The problem was solved by providing an auditorium with a gymnasium stage. The practicability of this plan was proved when over 1200 tickets were sold for one basketball game.

A further point to be considered was that the village had no library. The new plan, therefore, provided for a separate outside entrance to the library so that it might serve the community as well as the school.

Most communities, in providing new school buildings must consider the possibility of a future increase in population. In Painted Post this problem was especially important, for there is a large manufacturing concern located there which pays over one half of the taxes. The heads of this concern saw not only the need for the most modern school facilities available for the children of their present employees, but also the necessity for planning the building to meet the future expansion of their business. Therefore, provision was made for two future wings which will double the capacity of the school.

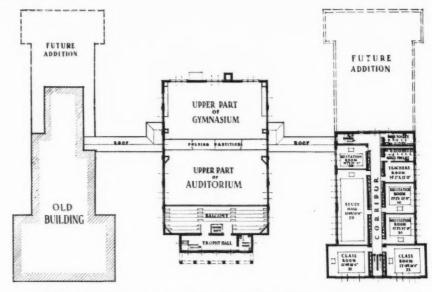
The mechanical equipment is already planned for these future needs by making provision for the extension of the heating, ventilating, plumbing, and electrical service to the new wings. Space is provided for a future boiler, and the header is ready for connections. The plumbing lines are ready for the setting of future fixtures.

In designing the exterior of the new school, the architect studied the community. There are many fine old colonial houses in the vicinity of Painted Post, and it is to harmonize with them that the new building has been done in the colonial style of the Greek Revival period. While harmonizing with other buildings of the community its larger size and its beauty and dignity of line make it easily the outstanding architectural feature of the community.

The plans for the new building as shown in the accompanying cuts provide for the following rooms on the ground floor: General-science laboratory; school and community library, with a separate entrance from the outside; three recitation rooms; two home classrooms; principal's office, vault, and toilet; and boys' and girls' toilet rooms.

Two stairways lead to the second floor where there are a large study hall, two home classrooms, three recitation rooms, a teachers' restroom, and boys' and girls' toilets.

On the top floor are a classroom, a recitation room, a drawing room, a completely equipped physics and chemistry laboratory with preparation room and storeroom, cooking room, sewing



TYPICAL FLOOR PLAN, PAINTED POST HIGH SCHOOL, PAINTED POST, N. Y.
Palmer Rogers, Architect, New York, N. Y.

room, model dining room, and adjacent storerooms. Boys' and girls' toilets also are provided on this floor.

The basement under the building is left unfinished but planned so that it can be used for instructional purposes in the future.

The community building in the center of the school group is entered through the colonial portico. Three arched entrance doors with bulletin boards on either side give access to the lobby.

At the left, in the lobby, are the ticket booth and stairs to the trophy hall. There is a women's toilet on this floor. The trophy hall above contains a trophy case of mahogany and plate glass, which is illuminated, for exhibition of the school cups. On the walls are hung pictures of school teams, school flags, and banners. A men's toilet is provided on this floor.

The auditorium contains over 800 opera chairs. The floor is sloped toward the stage and also dished to each side in order to give every spectator a good view. The balcony is stepped so that it affords an exceptionally good view of the auditorium and stage. A booth for moving-picture machines, lanterns, and spotlights is located at the rear of the balcony.

The auditorium and gymnasium combination is a feature of the building. The plan, which has proved particularly successful in this school, places the gymnasium floor on the same level with the stage. Two mahogany folding partitions 16 feet high and 73 feet wide divide the

auditorium and gymnasium and also provide a corridor, which connects the corridors between the adjoining buildings. These partitions make it possible for the auditorium and gymnasium to be used as separate units or together. With the doors thrown open, the entire seating capacity of the auditorium may be available for the viewing of basketball games, and other forms of school or community activities, on an exceptionally large stage.

The gymnasium provides for a standard basketball court with ample side lines. It is also fully equipped with gymnasium apparatus.

The physical director's office and a room for the school nurse are provided on this floor. Stairs lead from the gymnasium floor to the boys' and girls' locker rooms and showers in the basement.

The central heating plant which takes care of the three buildings is also located in the basement. The buildings are heated by low-pressure steam, using the split system with a central fan plenum system and direct radiation under the windows. The radiation is automatically controlled by thermostats. The heating system is planned so that each building can be heated or ventilated separately.

Provision is made for electrical lighting, fire alarms, clock and bell system, intercommunicating telephones, and for future radio connections. Special lighting equipment and disappearing footlights are used in connection with the stage.

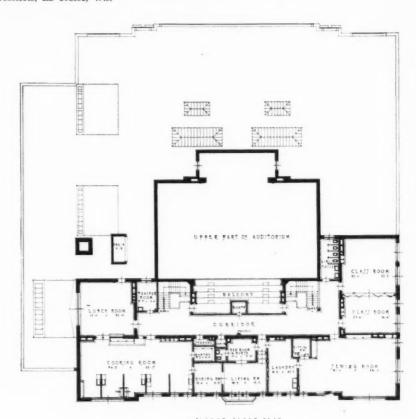
(Concluded on Page 144)



BELOIT VOCATIONAL SCHOOL, BELOIT, WIS. Merman and Skogstad, Architects, La Crosse, Wis.



BELOIT VOCATIONAL SCHOOL, BELOIT, WIS. Merman and Skogstad, Architects, La Crosse, Wis.



BELOIT VOCATIONAL SCHOOL, BELOIT, WIS. Merman and Skogstad, Architects, La Crosse, Wis.

#### THE BELOIT VOCATIONAL SCHOOL Merman & Skogstad, Architects, La Crosse, Wisconsin

The new vocational school at Beloit, Wisconsin, has been planned to meet the needs of a city of 25,000 in which all vocational work is centralized in one school.

The building occupies a splendid site fronting the Rock River on the east and Fourth Street, a residence street, on the west. The total site is three and one fourth acres and will permit of enlargements to the building. Except for a small amount of space for the heating and ventilating apparatus, the building contains no basement. The first floor is divided pretty equally between the commercial department and the trades department for boys. The offices of the principal adjoin the front entrance and beyond these is the library. The auditorium-gymnasium occupies the center of the first floor where it is accessible from the front as well as the side corridors. The room has

ample skylights. The drafting room and the woodworking and metal-working shops occupy the north wing of the building.

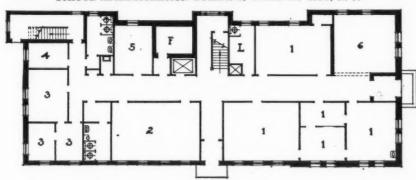
The second floor is devoted to classrooms and space for the household-arts department. A lunchroom, which makes use of the facilities of the cooking department, is also on this floor.

The plans indicate very clearly how the building is to be enlarged in order to provide additional space for trade subjects,

(Concluded on Page 147)



SCHOOL ADMINISTRATION BUILDING, ATLANTIC CITY, N. J.



FIRST FLOOR PLAN, SCHOOL ADMINISTRATION BUILDING, ATLANTIC CITY, N. J.

# ATLANTIC CITY HOUSES ITS SCHOOL-BOARD OFFICES

A healthy sign that school boards and superintendents recognize the importance of the schools in the life of the community is to be found in the tendency to place the school-board offices in dignified, carefully arranged, and wellequipped central administration buildings. While, undoubtedly, the chief purpose of planning and erecting such buildings is to achieve efficiency in the conduct of business, it has been observed that a school-administration building establishes the independence of the schools from the municipal government and places the entire school personnel in a new and satisfactory relationship with the influential elements in the local business and civic life. The list of cities, large and medium-size, which have maintained centrally located buildings is steadily growing.

The latest addition to the list of such structures is the new school-administration building at Atlantic City, N. J. It is a substantial and dignified edifice, planned with a view of providing every facility likely to be demanded. This not only implies the regular offices for the business and professional executives, a meeting place for the board of education, vaults, lockers, and storerooms, but also includes a series of conference rooms.

Atlantic City proceeds upon the idea that school business comes under the caption of big business, and that a modern school system must



SUPERINTENDENT'S OFFICE, SCHOOL ADMINISTRATION BUILDING, ATLANTIC CITY, N. J.



ASSEMBLY ROOM, SCHOOL ADMINISTRATION BUILDING, ATLANTIC CITY, N. J.

Howard A. Stout, Architect, Atlantic City, N. J.

surround itself with the facilities that make for efficiency and economy. Furthermore, that a structure of this kind makes for a closer cooperation between the executives and the teaching corps, between the board of education and the general public. A key to the floor plans notes the location of the several offices and rooms, as follows:

First Floor
Department of Health Education
Director of Music, Elementary Schools
Attendance Department
Janitor
Storeroom
Bureau

Storeroom
Bureau of Information and Telephone Exchange
Fireproof Vault and Elevator
Lockers—Clerical Force
Second Floor
Board of Education
Secretary of the Board of Education
Assistant Superintendent of Schools (In charge of
Buildings and Grounds)
Director of Art, Elementary Schools
Supervisor of Handwriting
Restroom
Mimeographing Poem

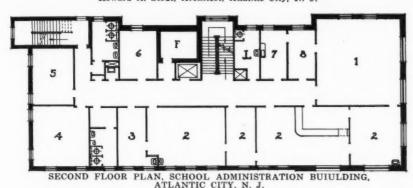
Director of Art, Elementary Schools
Supervisor of Handwriting
Restroom
Mimeographing Room
Committee Room
Fireproof Vault and Elevator
Lockers—Clerical Force
Third Floor
Superintendent of Public Schools
Library
Assembly Room
Supervisor of Household Arts
Supervisor of Primary Grades and Kindergarten
Work
Supervisor of Grammar Grades
Visiting Teacher
Mimeographing Room
Fireproof Vault and Elevator
Lockers—Clerical Force
The exterior of simple classical design is of The exterior of simple classical design is of Indiana limestone and light brick. The main

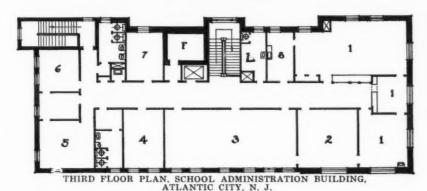
lobby and halls with their terrazzo flooring and high wainscoting of Italian marble are impressive. In the center of the building there is a stairway of Tennessee marble flanked by a balustrade of ornamental iron. The harmony of color and design is continued in the rich American walnut of the doors and wood trim. The board-of-education room with its wall paneling and ceiling of walnut is strikingly beautiful. Throughout the building, the harmony of furnishings and equipment show a most careful attention to the minutest detail.

The well-equipped offices of the superintendent, the secretary of the school board, and the various supervisors supply the needed conditions for executive work. Opportunity is given to work out school problems in comfortable, quiet rooms. Cabinets, filing cases, desks, and fireproof vaults are so constructed that school materials can be well classified and easy of access. The grouping together of administrative and supervisory offices in the same building gives opportunity for cooperation and consultation with the greatest economy of effort and time. The assembly room, with a seating capacity of 80, is deemed of value. In this room are held teachers' meetings, principals' meetings, university-extension classes, and supervisory conferences. Heretofore such meetings were held in classrooms which had been occupied all



OFFICE OF THE SECRETARY OF THE BOARD OF EDUCATION, SCHOOL ADMINISTRATION BUILDING, ATLANTIC CITY, N. J. Howard A. Stout, Architect, Atlantic City, N. J.





day by children, and in which the seating was not adapted to adults. Now teachers' meetings assume a different aspect in this comfortable, attractive room with movable chairs, blackboards, and bulletin boards.

The schoolrooms proper occupy of the building, and the center per them is taken up by a large audit them is taken up by a large audit ground floor accommodates at ground floor accommodates at ground floor accommodates.

The total cost of the structure is \$341,410. This includes the cost of the site which was \$72,000. The general construction cost ran up to \$196,217. The next largest items were \$17,370 for heating and ventilation; \$14,952 for furniture; \$6,614 for cabinet work; \$5,935 for plumbing; \$2,422 for steel filing equipment, etc.

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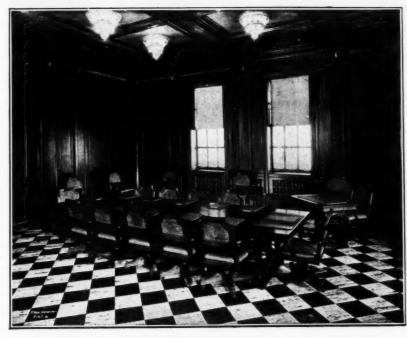
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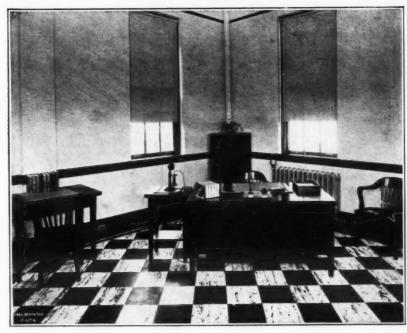
# THE HIGH-SCHOOL BUILDING AT NEW ALBANY, IND. Designed by W. C. Findt, Architect

The new high-school building at Albany, Ind., was designed by Mr. W. C. Findt, to meet a rather unique local situation. It was proposed by the school authorities that the building should be in every way a community center as well as a school, and that it should serve a wide variety of community needs and assist in promoting economic and commercial interests of the town as a whole as well as social and educational needs.

The building occupies a commanding site and constitutes an important architectural feature of the city.



BOARD OF EDUCATION MEETING ROOM, SCHOOL ADMINISTRATION BUILDING, ATLANTIC CITY, N. J. Howard A. Stout, Architect, Atlantic City, N. J.



SUPERVISOR'S OFFICE, SCHOOL ADMINISTRATION BUILDING, ATLANTIC CITY, N. J. Howard A. Stout, Architect, Atlantic City, N. J.

The schoolrooms proper occupy opposite ends of the building, and the center portion between them is taken up by a large auditorium and an exceptionally large boys' gymnasium. The ground floor accommodates at one end the physics and chemistry laboratories, space for the home-economics department, and a school printshop. The opposite end provides space for shops and a drafting room. The area under the auditorium accommodates the lunchroom and locker rooms for boys and girls. The main floor of the boys' gymnasium is also located on the ground floor.

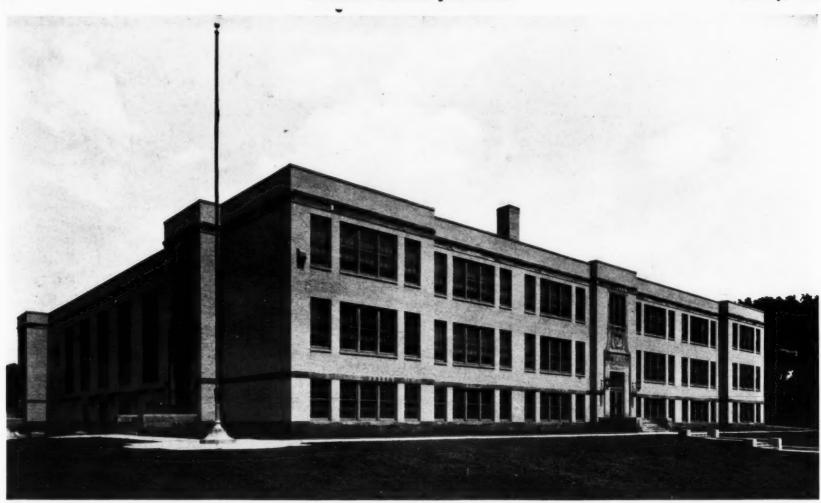
On the first floor, the front classroom unit contains five standard classrooms and the administrative offices for the school. The rear classroom unit contains an art room, a science room, and four classrooms. The auditorium may be entered from the first floor. The stage is large enough for basketball games and is equipped to be used as a girls' gymnasium. Adjoining it there is storage space, a room for the physical instructor, the school clinic, and a girls' restroom.

The front classroom unit on the second floor contains a standard classroom, a large library and study room, and three rooms for commercial work. There is also a small restroom for teachers. The rear classroom unit on this same floor contains six standard classrooms. The balcony of the auditorium may be entered from this floor.

The gymnasium for boys has been planned not only to serve for school needs, but also for a wide variety of community purposes. It contains not only two large balconies entered from the second floor, but especially large collapsible bleachers for games and exhibitions. The room serves for various community purposes. As will be noted in the illustration, it serves splendidly for an annual automobile show.

The auditorium is fitted like a little theater and contains not only a complete stage, but also has a projection booth.

The building is built of light-colored brick with limestone trim. The exterior design has been carefully restrained and depends upon pleasing masses and careful attention to scale for its interesting effect. The construction throughout is fireproof with terrazzo floors in corridors and stairways and hard maple floors over the concrete slab in the classrooms. Concrete floors have been used in the laboratories and shops and terrazzo has been employed in the cooking rooms and in the cafeteria. The wood shop has a wood floor to obviate possible



HIGH SCHOOL, NEW ALBANY, IND. W. C. Findt, Architect, New Albany, Ind.

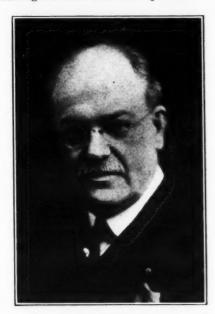


INTERIOR VIEWS OF THE HIGH SCHOOL, NEW ALBANY, IND. W. C. Findt, Architect, New Albany, Ind.

## President Boynton Invites School World

President Frank D. Boynton of the Department of Superintendence, N. E. A., invites the educational world to the Cleveland meeting in the following language:

"Fully 100 participants will be 'new faces' with something behind them. In all of the discussion groups, a program has been worked out equal in strength of participants to any general sessions program. In each discussion group, there will be free discussion from the floor. If possible, come to this convention and participate in the discussion. In matter of halls for these meetings, in matters of accommodations, in musical programs furnished by Cleveland, we are looking forward with anticipation."



FRANK D. BOYNTON
Superintendent of Schools, Ithaca, N. Y.,
President of the Department,

In discussing the program which is to be presented February 24 to 28, President Boynton submits the following:

"The following thesis has been chosen for the four days of the forthcoming Cleveland Convention of the Department of Superintendence, namely, "How Can the Public Schools Better Serve Democracy, Increasingly Produce a Higher Type of Citizen in the Fullest Sense of the Term?" Thus, in one short sentence we have stated the goal of tax-supported education in America and one of the chief objectives of the churches of America.

"More than this has been done. Of late, certain classes have raised the question of the cost of education due to our teaching too many people too many things. Waiving the fact that these critics have failed to set up standards for eliminating 'too many persons' and have failed to point out the 'too many things' to be eliminated, the more than 150 persons who are to participate in the program will undertake to discuss specifically these issues.

"For example, Monday's theme is: 'How can the Thesis be in part answered through a Better Financing of Education? The general session Monday forenoon will discuss this question. In the afternoon, nine discussion groups will continue the discussion. Monday evening will give a demonstration of public service through physical and health education. After this manner, each day will be spent in seriously considering certain phases of the question raised by the Convention Thesis.

"The theme for Tuesday forenoon and afternoon is: 'How can the Thesis be in part answered through a Better Articulation of the Units of American Education?' This day's work ends Tuesday evening with a joint session with the American Education Research Asso-

ciation setting forth the advantages of research in refining, clarifying, and unifying education as a single process.

"Wednesday will devote the morning and afternoon to the discussion of realizing the Convention Thesis through a Better Selected, Retter Trained, and a Better Paid Teaching Staff maintaining that education, the basal business of the nation calls for, first, strong men and women, the equal of those in any other business, industry, or profession, equally compensated.

"The program culminates on Thursday. College and university presidents and professors; state, city, and county superintendents; business and professional men, and men engaged in industry have been called and will take part in the discussions.

"We want the people to know of the service as well as the cost of their schools; and we want them to know how our present program of service to all children came to be. In other words, the aim of the Cleveland Convention will be to discuss the questions that lie at the center of public education. Not a single person will appear upon the program who is not an authority upon the subject or phase of the subject which he discusses, one who has accomplished results worth passing on."

# DEPARTMENT OF SUPERINTENDENCE PROGRAM

The Department of Superintendence of the National Education Association will hold its annual winter meeting February 24 to 28, at Cleveland, Ohio. Mr. Frank D. Boynton of Ithaca, president of the department, will preside at the sessions.

A special railroad rate of one and one half fare has been arranged for those desiring to attend the meeting. The convention headquarters, registration, post office, exhibits, and general sessions will be housed in the Public Auditorium.

#### The Program

Monday Morning, February 25
Address of welcome—Mr. E. M. Williams, president of the board of education, Cleveland.

President's address-Mr. Frank D. Boynton, super-intendent of schools, Ithaca, N. Y.

Our Chief Concern with the Future Building Program
Mr. Joseph M. Gwinn, superintendent of schools, San
rancisco, Calif.

How is Education to be Financed in View of the Increasing Cost?—Mr. George D. Strayer, professor of school administration, Teachers' College, Columbia University, New York.

Monday Afternoon, February 25
Discussion Groups
Group 1, county superintendents, Mr. J. W. Sweeney, St. Marys, Pa., chairman.
Education and Finance, Mr. Paul R. Mort, Teachers College, Columbia University, New York City.

College, Columbia University, New York City.

Financing the Rural Schools, Mr. C. E. Rarick, Kansas State Teachers' College, Hays, Kans.

Proper Rural Facilities, Mr. Ernest Burnham, Western State Teachers' College, Kalamazoo, Mich.

Group 2, Cities of less than 10,000 population, Mr. L. H. Bugbee, West Hartford, Conn., chairman.

Group 3, Cities over 10,000 and less than 50,000 population, Mr. Wilbur H. Lynch, Amsterdam, N. Y., chairman.

Can Building Costs Be Cut? Mr. Roy R. Roudebush, assistant superintendent of public instruction, Indianapolis, Ind.

To What Extent Should School Funds be Used for Activities Not Strictly Classed as School Work? Mr. M. G. Neale, dean of the school of education, University of Missouri, Columbia.



INTERIOR OF THE AUDITORIUM, CLEVELAND, OHIO, WHERE THE MEETING WILL TAKE PLACE.

The Cause of Increase in School Costs, Mr. Louis P. Benezet, superintendent of schools, Manchester, N. H. Is the State Justified in Supervising Schools Where It Supplies Money for Local School Expensest Mr. William W. Fairchild, superintendent of schools, Rutland, Vt.

Group 4, Cities of 50,000 to 100,000 population, Mr. W. Mayberry, Wichita, Kans., chairman. What Education Should be Publicly Financed? Mr. Frank G. Pickell, Montclair, N. J., chairman.

How a City of 100,000 People Profits From an Adequate Statewide Financing System—Mr. Paul R. Mort, New York City.

Economies Effected Through Efficient Business Man-pement, Mr. Homer Shepherd, Knoxville, Tenn. Practical Economies in Effect in Cities of 100,000 cople, Mr. M. C. Lefler, Lincoln, Nebr.

Group 5, Cities larger than 100,000 and less than 00,000 population, Mr. George N. Child, Salt Lake ity, chairman.

The Attitude of the Public Mind Toward Taxation, Mr. A. L. Threlkeld, Denver, Colo.

The Relationship Between the Financial Support of Education and the Results, Mr. C. B. Glenn, Birming-ham, Ala.



R. G. JONES Superintendent of Schools, Cleveland, Ohio, Host to the Convention.

Why School Costs Have Increased in Recent Years, Mr. R. L. Jones, Memphis, Tenn.

Financial Economies in School Administration, Mr. P. C. Packer, Iowa City, Iowa.

Group 6, Cities of over 200,000 population, Mr. Frank Cody, Detroit, Mich., chairman.

State Aid for Education, Mr. J. A. H. Keith, Harrisburg, Pa. The Pay-as-You-Go Plan for Capital Costs, Mr. H. C. Morrison, Chicago, Ill.

A Continuous Publicity Program, Supt. R. G. Jones, Cleveland, Ohio.

Group 7, Music education, Mr. Will Earhart, Pittsburgh public schools.

Group 8, Assistant and district superintendents of schools, Mr. Frank M. Underwood, St. Louis, Mo., chairman.

Tuesday Morning, February 26

The Work of the Commission on the Articulation of Educational Units, Herbert S. Weet, superintendent of schools, Rochester, N. Y., chairman.

Waste in American Education Through Lack of Coordinated Units in Education, Dr. John Dewey, professor of philosophy of Columbia University, New York. The Problem of Articulation as Seen by the College and Professional Schools, Dr. Edward C. Elliott, president of Purdue University, Lafayette, Ind.

The Necessity of Coordinating Educational Activities with Public Affairs, Dr. Leonard P. Ayres, Cleveland Trust Company.

#### Tuesday Afternoon, February 26

Tuesday Afternoon, February 26
Group I, Joint meeting with the National Council of Kindergarten Supervisors and the National Council of Primary Education.

Problems and Progress in the Articulation of the Kindergarten and the Primary Grades, Miss Julia L. Hahn, San Francisco, Calif., chairman.

Group 2, New types of organization of school units, Mr. George Melcher, Kansas City, Mo., chairman.

The Advantages and Disadvantages of the Six-four-four Plan of Organization, Mr. William J. Cooper, state superintendent of public instruction, Sacramento, Calif.

The Texas Junior High School, Mr. M. H. Moore.

state superintendent of public instruction, Sacramento, Calif.

The Texas Junior High School, Mr. M. H. Moore, superintendent of schools, Fort Worth, Tex.

The Possibilities of the Four-Year Junior College, Dr. James M. Wood, president of Stephens College. Columbia, Mo.

Group 3, Economy of time in the reorganization 6.2 educational units, Dr. Charles H. Judd, University c.2 Chicago, chairman. The speakers will be Mr. Fred J. Kelly, Moscow, Idaho; Dr. Samuel C. Capen, Buffalo, N. Y.; Dr. C. R. Mann, Washington, D. C.; Mr. David A. Robertson, Washington, D. C. Group 4, Accrediting agencies and college-entrance requirements, Dr. J. B. Edmonson, University of Michigan, Ann Arbor, Mich., chairman. The speakers will include Mr. Jesse Newlon, New York City; Mr. Lewis W. Smith, Berkeley, Calif.; Mr. Jesse B. Davis, Boston, Mass., and Mr. George M. Wiley, Albany, N. Y. Group 5, Advantages and disadvantages of the six-year high school for the larger city and smaller community, Mr. R. E. Tidwell, Montgomery, Ala., chairman.



# School Board Journal

WM. GEO. BRUCE WM. C. BRUCE

EDITORS

#### EDITORIAL

# TENDENCIES IN THIS YEAR'S SCHOOL LEGISLATION

In the states where the legislature is in session at this time, the educational forces are also ready to advocate programs for reforms. These programs include a variety of innovations and changes in the school laws of the several states. In the main, they aim at a better diffusion of educational opportunity and a more equitable distribution of the tax burden.

The measures proposed bear in mind the incongruities in the several school units in the state, namely, the difference between the rich and the poor school districts, and contemplate a method of state support that will equalize between the two. The legislator who is confronted with these measures soon realizes that education, like everything else, costs considerably more than it did a decade or two ago.

The laws that were deemed satisfactory two decades ago are badly out of tune with present-day needs. The expansion and momentum which America's popular system of education has experienced has also emphasized the financial inequalities which afflict the school units. The school child has grown. Larger clothes are needed.

The solution must be found in more liberal state aid and an equitable distribution of that aid between the several school units. One of the basic considerations which enters here is that of establishing the county as the unit of administration and thus bringing the several districts under some unified form of control. Such control brings to the surface the weak districts and enables the administrators to designate the remedy.

The legislative trend promises also to secure greater financial independence for the city boards of education. Many of these are subjected to city council control on matters of finance far beyond the bounds of reason and common sense. The forces that contend against greater financial freedom for boards of education are inclined to resist a change of laws. A modern city council is better equipped to influence state legislation than is the average board of education. It holds to its prerogatives with a peculiar tenacity.

The several state educational organizations are better equipped with definite legislative programs than they ever have been before and will go forward to their task with considerable energy and preparedness.

Underlying much of the school legislation is found the question of taxation. A more liberal school aid means more taxation which in many instances will reduce the whole program to new sources of revenue or a heavier burden upon present sources. The educator who champions greater school aid will also have to come prepared to suggest where and how that aid is to be secured.

# WHAT MUST THE SCHOOL-BUILDING DOLLAR YIELD?

With the advent of more and better school buildings comes also the question of how a maximum return for the dollar may be obtained. Architects and engineers have made remarkable strides in planning and constructing serviceable school housing, but it still remains for the administrative heads to determine upon the fundamental factors. Safeguards and restrictions, designed to make every dollar expended to secure a dollar's worth in return have been devised.

The New York City board of education will expend this year the sum of \$57,244,000 for new school buildings. The expenditure will provide for elementary, junior, and senior high schools. The machinery which the New York school authorities have provided for carrying out elaborate building programs is well adjusted and efficient. It has constructed more school-houses than any other similar agency in the world.

And yet this fact does not minimize the responsibility of the board of education. While on the one hand it must know what the housing needs are, to what extent they must and can be met, and supply financial aid required, it must also know what the school-building dollars ought to buy. It is responsible for the school-building machinery and must see to it that it functions efficiently.

But what applies to a large school system, erecting many buildings, applies equally to a small school system erecting new buildings, semi-occasionally. The school authorities must primarily know what is wanted when it comes to the construction of a schoolhouse, and must see to it that its architects, engineers, and contractors do their part.

In discussing the huge expenditure to be made by the New York City board of education, Howard W. Nudd of the Public School Association contends that in the designing of any school building three questions must be answered: (1) Is the construction sound? (2) Is it economical? (3) Is it adapted for the educational purposes for which it is used?"

Experience has proved that even a well-organized school building department may become subject to lapses and the taint of weakness. A year ago New York found that several new school buildings under construction were defective. Somebody was "skinning the job." The element of safety was ignored.

Economy is another problem which cannot be overlooked. Mr. Nudd in discussing this phase of the subject says that economy "Economy is another seriand extravagance: ous problem. A \$5,000,000 high school may be economically built. It may also be a very poor investment if it contains waste space, if its interior is ill-arranged, if its floors are of such poor material that they must be resurfaced or entirely rebuilt within three years after the building is constructed, if its walls settle and crack, if its roof leaks, if it is too large or too small, if it lacks space for essential activities, if it is definitely unattractive architecturally. Economy, thus, is closely linked with sound construction and also with the third question, that of adapting the building to its educational purposes."

In the development which has characterized the building of schoolhouses the question of safety has been stressed at all times. Some sad experiences have led to greater caution and circumspection in making buildings safer than they had been. The subject of economy has usually been uppermost in the minds of those intrusted with building projects. The mistakes which have been made here have grown out of ignorance rather than willful waste.

The one phase of schoolhouse construction which has enlisted greater attention in recent years than ever before is that of adaptation. It is here where the educator has stepped in and made the operation of a school plant clear to the architect. The latter has thus come by many degrees closer to his problem, the best expressions today in schoolhouse planning are due to the fact that there has been a closer cooperation between the school authorities and the architects.

Thus, the school-building dollar is rendering more today than it ever has before. The school authorities are in a better position to secure full value for every dollar invested because they know just the kind of building they want and must have.

# THE ABOLITION OF STANDING SCHOOL-COMMITTEES

With the transition from large to small school boards, which reached its greater momentum some ten years ago, there came also into recognition a new conception of the scope and function of the individual school-board member and his relation to the collective body.

The school board reduced in numerical size, soon recognized that its own scope must be confined to the legislative and judicial labors, and that the executive must be delegated to the experts employed by the board. This delegation of labors was also actuated by the fact that while a school-board member was intrusted with the task of formulating administrative policies he could not reasonably be expected to perform professional services. The selection of teachers, the choice of textbooks and the formulation of a course of studies clearly come within the province of the superintendent and his assistants.

With this conception of the scope and function of the school-board member there came also the abolition of the standing committee. It has been the custom of committees to debate the questions that came before them and to submit their findings in the form of committee reports to the full board. Such reports were frequently adopted simply because they were committee reports and because committees are supposed to know all about it. Here is developed, too, that a committee of five was frequently only attended by three members. were on the affirmative side, one negative. The stronger of the two carried his point, the second man asserted himself and the third did not care to engage in a minority report. Thus, a schoolboard action sometimes expressed the desires of one man only rather than that of five men, and was acquiesed in by a trusting but uninformed

The plan of abolishing standing committees and bringing all matters before the whole board has thus far worked out well. Occasionally a reaction is experienced, and a return to the committee system is urged. But where the return to the committee system has come under serious discussion it has been found, too, that a compromise is usually engaged in that a special committee rather than a standing committee will solve the problem.

In arguing the reestablishment of a standing committee on teachers a member of a school board in a Midwest city recently said: "When it comes to my voting on a list of teachers I want to know exactly who they are, what they are, why they should be appointed. In fact, I want to know what I am voting for. Therefore, I want to sit on a committee that selects the teachers."

And right here is where the up-to-date member will say: "All I want to know is whether the superintendent has recommended these teachers for appointment. He is hired, because he ought to know. I do not propose to concern myself

with the capabilities of the teachers. I am not a trained schoolmaster, hence not in a position to pick teachers."

Members of boards of education easily lapse into the mistake that their job requires detailed knowledge about every teacher that is employed. The moment, however, that the member says that he must know all about a teacher before he will vote for his appointment, that moment he has gone beyond his true function. That moment, too, he begins to question the fitness of the superintendent who is held responsible for the successful conduct of the schools and who therefore must have the widest possible latitude in choosing his forces.

#### THE NATION'S GREATEST EDUCATIONAL BODY

One of the most gratifying factors in the educational life and labors of the nation must be found in the fact that the educators themselves have not only appreciated the value of cooperation but have learned to construct a powerful organization which reflects the finest traditions of American progress as well as the highest aspirations of a great profession.

The genius which prompted the educators to serve their country in a collective as well as in an individual capacity has found eloquent expression in the formation and maintenance of the National Education Association.

It has stimulated the professional spirit of the thousands of school executives and classroom workers, made for higher standards and ideals in the educational service, and has created a great clearing house for educational innovation and departure. Thus the splendid men and women identified with America's system of popular education may look with some pride to the great organization which reflects all the better impulses of a singular profession. In doing so they may also incidentally manifest concern for its continued growth and stability. Certain it is that they are deeply interested in all that will make for a widened service and an intense zeal for the objectives to be striven for. Any refinements in the plan of organization and in the manner of formulating principles and policies which are within reach, necessarily must enlist their attention.

The plan of organization adopted recognizes the principles of democracy. The constituent parts making up the whole have a voice in saying who shall rule. It may still remain to improve the system whereby the sentiments of the rank and file of the membership are sounded out as to the policies that shall guide the leadership in dealing with passing problems. A comparatively small house of delegates may reflect the sentiments that an enormous constituency entertains. And yet in a concentrated representation the minority voice may be minimized into absolute silence.

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We call to mind here the method employed by the Chamber of Commerce of the United States whereby all questions are submitted to a referendom vote. Not only are the constituent groups asked to examine the affirmative and negative sides of a question, impartially presented, but the individual member as well is invited to give expression. The minority voice, no matter how feeble, is never squelched. It secures a respectful hearing, and its opinions are accurately recorded. Thus, individual opinion finds an aggregate expression.

It is one thing for the leaders to hammer their pet notions and overwhelm the constituency into an attitude, and quite another to present both sides of a question and secure the uncoerced judgment of the constituent body. Opinions and attitudes must surge from the bottom to the top rather than to be pressed down from the top to the bottom. Therefore an organization cannot attain its objectives by running counter

to membership sentiment or by engaging in departures which the public is not prepared to accept. Hence, it cannot secure the enactment of laws affecting education which the membership does not fully sustain and which public opinion does not support in a whole-hearted way. judgments, of the rank and file must find ade-The sentiments and emotions, the opinions and quate expression in the leadership that has been

The science of organization has made remarkable strides in recent years in the field of commerce and industry, and in the professional callings. It has not only sought to overcome immediate evils and obstacles thus making for the material advancement of its constituency, but it has fostered standards and ideals as well. It has not only sought to diffuse information likely to promote individual efficiency, but it has sought to stimulate self-determination and self-expression on the part of the entire membership as well.

America's great educational body already has behind it a remarkable record, but it is only at the threshold of an epoch-making career. It will continue with increasing power to give momentum and direction to popular educational effort, and thus prove a vital factor in insuring the prestige and perpetuity of the nation. It must not only hold to the highest standards and ideals, observe the spirit of democracy in its plan of organization, but must also take recourse to that trend of general public opinion without which even the most attractive innovations and departures are not possible.

The same wisdom, we are confident, which founded the National Education Association, and reared it into a marvelous instrument for service, must be applied in seeking those refinements which will enable it to continue on its career with confidence and strength, and realize the grand mission it has set for itself.

# THE GROWING POPULARITY OF SCHOOL-HOUSE DEDICATIONS

There was a time when the doors of new school buildings were opened to the pupil constituency with less of the joyous pomp and circumstance of a modern dedication program. The school authorities were concerned in seeing that they got their money's worth in building material and mechanic-like construction, and to satisfy themselves that the promises of the architect had been met.

With a new era in school architecture there has also come a stimulated pride in a school edifice. A schoolhouse is no longer a crude creation of wood, brick, or stone walls, with clumsy roofs and unsightly towers, but a structure which is simple yet graceful in exterior design, and attractive and convenient in interior orientation.

Among the various housings of the community the modern school stands out as a dignified structure pleasing to the eye and expressive of the purpose for which it serves. The citizen points with pride to the new schoolhouse as something that notes the cultural progress of the community.

Thus, the opening of a new school building assumes greater importance. The citizen who has been called upon in an increased tax rate to pay for it, therefore, must be shown what his money has bought. And he who protested the loudest against the rearing of an imposing school structure also becomes loudest in its praise after the same is a reality.

The dedicatory ceremonies differ most widely, dependent upon the supply of local talent, and the measure of enthusiasm. Music and oratory lead. The president or the superintendent presides; a prominent educator delivers the principal address: a public official may be called upon; sometimes a judge is the speaker of the

Dramatics may be engaged in. Dinners and dances are not uncommon. Flags and flowers are certain to be in evidence.

There are not many occasions when the citizenship may gather under the roof of a schoolhouse to listen to a discussion on education. The annual graduation exercises afford such an occasion. A schoolhouse dedication is, however, more rare and more momentous as far as the educational history of the community is con-

The thought observed is that the occasion must serve in arousing an interest in the cause of popular education, stimulate town pride and local patriotism, and finally emphasize the relation of the school to the nation to the end that the stability and perpetuity of the latter may be fostered.

# MODERN TRAFFIC AND THE SAFETY OF SCHOOL CHILDREN

The safety of the inmates of school buildings has for some years received the careful attention of school administrators. Architects and engineers engaged in the planning and construction of schoolhouses have stressed the element of safety as well as that of convenience.

Now the subject of safety assumes a wider range. It is no longer a mere question of guarding the safety of children while at school but of protecting them against the hazards of modern street traffic. Where schools are located in quiet residence districts the dangers are few, but where they are located on busy streets, the problem of safety becomes an acute one.

The great army of school children must pass to and from their homes to the schools. street vehicles have increased a thousand-fold within the last two decades. The number of casualties has assumed a frightful rate. The number of school children who have become victims to modern street traffic is appalling.

School administrators in the larger communities have given the subject much thought and attention. The aid of the traffic police has been enlisted. Students' safety squads have been installed at street crossings adjoining school buildings. Instructions have been disseminated by the teachers to their pupils as to their movements on crowded streets.

A beginning in the direction of a comprehensive scheme of safety for school children has been made. It would seem, however, that all the forces thus far inaugurated must be strengthened. The individual child must be taught to realize the dangers of the street, and to practice proper caution and self-control. This is the task of the teacher. The cooperation between the school and police authorities can, in many instances, be improved upon. This is the task of superintendents and boards of education.

The same wisdom and circumspection which has in the past been demonstrated in the direction of the safety of children while at school must now be applied to their safety while in transit between home and school. The subject of safety must in many schools become a fixed part of the course of study. While self-preservation is always the order of the day, protection against modern street traffic must become a part of the education of the child.

NATIONAL ASSOCIATION OF SCHOOL-BUSINESS OFFICIALS HOLDS MEETING
Preparations for the annual convention of the
National Association of School-Business Officials,
to be held at Columbus, Ohio, on May 21-24, have
been completed by a local committee headed by Mr. Howard D. Smith, architect of the board of edu

cation at Columbus.

The meetings of the association will be held in the beautiful "Hall of Mirrors" of the Deschler-Wallick Hotel, and the headquarters will be in the

same building.
Exhibit space has been arranged in the passages leading to the Hall of Mirrors and on the adjoin-

Rate %

3.797

4.298

Past Six Years

. . . . . . . . . .

<sup>4</sup>Taken from Federal Re-serve Bulletin. <sup>5</sup>Not final.

TABLE IV

Year

1925

1924

1923

1922

Rate % 1927 ..... 3.464 3.515 1926 ..... 3.544

Past Twelve Months

Dec. ....

Nov. .....

Oct. .....

Sept. .....

May .....

Feb. .....

...... 3.515

3.495

3.48

3.54

3.50

3.35

3.32

3.30

3.36

type of issue will run for a longer period. This

seems to be the situation regarding several million dollars worth of school-construction

issues of December. These long-time New York

City school issues are added to the monthly total of school bonds. It is this addition that

sent up the total bond sales in December. It

would be obviously absurd to add the short-time

issues to the total for the month and this is not

During December, there was an unusually

long list of cities that tried to sell bonds and

received no bids. As has been said before, this is an expensive kind of a mistake for school

people to make. Either the school board should

not try to sell bonds, or else the interest rate should be put high enough to attract a bid.

(Concluded on Page 150)

Month

Jan.

1928

### Index of School-Bond Prices<sup>1</sup>

Harold F. Clark, Teachers College, Columbia University, New York, N. Y.

There has been an almost imperceptible decline in school-bond interest rates. interest rate on all school bonds sold in December was 4.44 per cent. The net interest rate on all bonds sold in November was 4.45 per cent. As the figures show, the net interest rate on school bonds in December was .01 of 1 per cent lower than the rate in November.

This decrease in bond prices in December was doubtless brought about by the temporary

sales. New York City sells notes or certificates for shorter or longer periods for very large sums which under no reasonable interpretation could be called bonds. The \$21,000,000 sold in November by New York City was clearly a bond issue and usually recognized as such. It is not unusual for New York City to issue 30, 40, or even \$50,000,000 worth of these notes in a single month. Many of the issues run for two months, three months, or six months. Occasionally, this

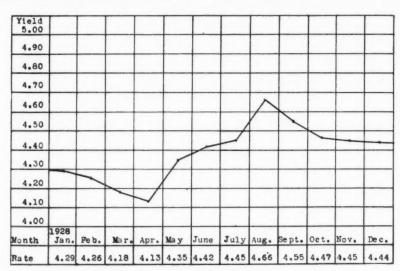


TABLE I. AVERAGE YIELD OF ALL SCHOOL BONDS SOLD DURING THE MONTH

easing of the money market in the first half of December. This in turn was probably caused by a break in the stock market which led to a reduction of about \$300,000,000 in brokers' loans and a temporary easing of money rates. The low interest rates were not to last long and the year-end financial transactions sent money to the highest rate in many years. There was some easing of money rates after the first of the year, but the new rise in the stock market was rapidly absorbing surplus money. Unless there is a decided change in the whole tone of the stock market, leading to the releasing of some of the credit now tied up in loans on stocks and bonds, there is not likely to be any substantial reduction in interest rates on school bonds. It is difficult to sell bonds yielding from 4.00 to 4.50 per cent when money in the New York call market is worth anywhere from 6 to 12 per cent.

There was only one bond issue reported in December as selling on a net interest base of less than 4 per cent. There were several selling for 6 per cent or more.

Just as the total amount of school bonds sold in November made a new record for the year, so December broke the record of November. Both months the record was entirely due to large sales by New York City. This suggests a very important point which is not carefully watched by many when discussing school-bond

# TABLE II

	Amounts and Yields of Bond Issues <sup>2</sup> December, 1928	2
1.	School bonds sold during the	
	month\$ 32,879,310	)
2.	All municipal securities sold dur-	
	ing the year (to date) 1,413,911,970	)
3.	All school bonds outstanding (es-	
	timated) 3,260,000,000	)
4.	Average yield of all school bonds	
	outstanding (estimated) 4.64%	,
5.	Yield of school bonds of ten large	
	cities 4.21%	,
6.	Yield of United States long-term	
	bonds (Quotation the middle of	

<sup>&</sup>lt;sup>2</sup>The monthly total of school bonds does not include all the bonds issued in the month, due to the difficulty of obtaining the yield on some of the issues.

3.49%

January) .....

Average Yield of Long-Term Federal-Govern-ment Bonds<sup>4</sup>

# TABLE III

done.

		Bond Sale	es and Kates		
	В	ond Sales		Average	Rates
Year	School	Municipal	All Public and Private	Year	Municipal
1927	\$266,000,000	\$1,509,000,000	\$7,735,000,000	1927	4.49
1926	260,000,000	1,365,000,000	6,311,000,000	1926	
1925	323,000,000	1,399,000,000	6,223,000,000	1925	4.58
1924	288,000,000	1,398,000,000	5,593,000,000	1924	4.26
1923	206,000,000	1,063,000,000	4,303,000,000	1923	4.76
1922	237,000,000	1,101,000,000	4,313,000,000	1922	4.81
1921	215,000,000	1,208,000,000	3,576,000,000	1921	5.18
1920	130,000,000	683,000,000	3,634,000,000	1920	5.12
1919		691,000,000	3,588,000,000	1919	5.04
1918	41,000,000	296,000,000	14,368,000,000	1918	4.90
1917		451,000,000	9,984,000,000	1917	4.58
1916		457,000,000	5,032,000,000	1916	4.18
1915		498,000,000	5,275,000,000	1915	4.58
1914		320,000,000	2,400,000,000	1914	4.38

<sup>3</sup>By special permission, based upon sales reported by the Commercial and Financial Chronicle.

# School-Bond Sales in 1928

More complete reports are increasing substantially the earlier estimates as to the total school-bond sales in 1928. The total is around \$225,000,000 and will doubtless be somewhat higher when all the sales of the year are re-ported. School bonds sold in the early months of the year in fair amounts and by May the monthly total was \$21,000,000. About this time interest rates began to rise and bond sales dropped off sharply. By August the monthly sales had dropped to \$8,000,000, the smallest monthly total for several years. From September on, the sales increased in amount until in December over \$32,000,000 worth of school bonds were sold. In both November and December a large part of the total was due to New York City issues.

Along with the great change in the amount of bonds sold during different months, there were equally great changes in interest rates in 1928. The year started with interest rates well toward the lowest point they had reached since the war. The net interest rate on school bonds the war. The net interest rate on school bonds sold in January 1928 was 4.29 per cent. The general trend of interest rates on bonds was down. This was equally true of school bonds. Interest rate on school bonds was 4.13 per cent. This was the lowest level reached since the war and was approaching pre-war levels. Prospects and was approaching pre-war levels. Prospects seem to be good for even lower interest rates,

but the policy of the Federal Reserve Board had

but the policy of the Federal Reserve Board had created artificially easy money.

This policy, along with substantial industrial activity, led to wide and long sustained speculation in the stock market. This speculative buying absorbed such a large amount of credit that by May there was a very decided increase in bond interest rates. The average interest rate in May was 4.35 per cent, in June it rose to 4.42 per cent, July to 4.45, and in August reached a high point of 4.66 per cent. In September the net interest rate on school bonds decreased to 4.55: October showed a further decrease to 4.47; 4.55; October showed a further decrease to 4.47; November to 4.45 and December to 4.44. The

November to 4.45 and December to 4.44. The average interest rate for the entire year of 1928 according to preliminary calculation was 4.39 per cent. This compares with an average rate of 4.48 in 1927 and 4.74 per cent in 1926.

What are the prospects for 1929? The general credit situation still remains the great unknown. As long as the stock market continues to absorb as large a quantity of money as it has in the past few months there is not likely to be any great reduction in hond interest rates. If in the past few months there is not likely to be any great reduction in bond interest rates. If the demand for money in the stock market would slow down and business and industrial activity go on at the present level, there probably would be some lowering of interest rates on bonds. Although there may be some temporary easing of money rates, all things considered, it seems probable that there will be no great change in bond interest rates at least great change in bond interest rates, at least during the first half of 1929.

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# To the "New Man on the Board We Write this Message"

It's not to the one who has served for years on the School Board that we write this message—he knows the nation-wide reputation of Kewaunee. Perhaps he has visited our great factories and has seen our craftsmen skillfully building Kewaunee Laboratory Furniture.

It is not to the one serving a second term on the board that we direct this message, for, no doubt, he or she has seen Kewaunee Laboratory Furniture in use or has had friends tell of the satisfactory service that Kewaunee Furniture always gives. Kewaunee is no stranger to a member of the board who has served a term.

It's the "New" members of the board to whom we wish to speak. We want you to know all about Kewaunee.

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We want you to know that Kewaunee maintains an engineering department that will help you and your board work out plans for laboratories, domestic science rooms, domestic art, manual training and mechanical drawing departments, without cost to you. By using our engineering department, when laying out plans for installation of laboratory or domestic science equipment, you avoid making costly mistakes. Our lifetime experience in this kind of work is at your disposal.

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No. 14223 COMBINATION PHYSICS AND CHEMISTRY TABLE

This design is practical for use as a student's desk or in a private laboratory. Has two larger and eight smaller drawers and four cupboards. Very solidly constructed and finely finished.

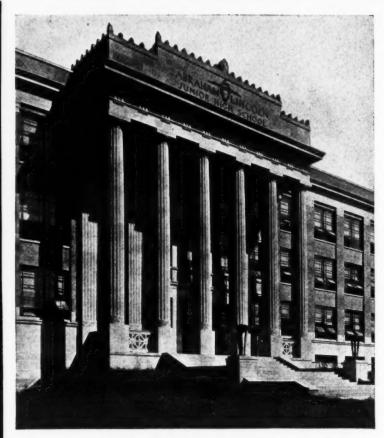


No. 1006 STUDENTS' BIOLOGY LABORATORY TABLE Where a complete work-table is desired, this will fill the need admirably.



No. 1302 ELECTRICAL DESK

Accommodates 8 students working in sections o four. Each student has one small drawer exclusively. The top tier of drawers and the cupboard are used in common. A two-gang set of Hubbel polarized plugs and receptacles is placed at each of desk.



The Abraham Lincoln Junior High School in which over 600 Fenestra Steel Units\_ 24,000 square feet—have been used.



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SEE how its narrow bars and large panes of glass will flood each room with daylight.

SEE how it puts schoolroom ventilation under easy, sure control-how its ventilators safely, easily, admit fresh air, yet close snug tight against stormy

SEE how it adds to the architectural beauty of the building.

SEE how effectively it can be shaded—how easily it can be washed from the inside.

HOW? In your locality there is a Fenestra Office-Fenestra organizations are located in all principal cities-where school architects, school officials, can see this new school window on display. Or Fenestra Engineers will arrange for a demonstration. You can inspect Fenestra types, study the details-and obtain literature—without obligation.

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#### School District Government

Where a board of education in a city of the third Where a board of education in a city of the third class consisted of nine members, five vacancies left the board without legal quorum and disabled it from transacting business (Kentucky statutes, § 3462).—Glass v. City of Hopkinsville, 9 Southwestern Reporter (2d) 117, 225 Ky. 428.

The treasurer of a school district, permitting the funds of a district to remain in the bank, knowing of the bank's insolvent condition, is held guilty of bad faith or lack of diligence, and is liable for loss of funds.—Onida Independent School Dist. No. 1 v. Groth, 221 Northwestern Reporter, 49, S. Dak.

#### Teachers

The signature of a school-district clerk to a notice preceding a teacher's contract is held not a signature to the contract by the charged party (Rem. complete statutes, § 5825).—Cope v. School Dist. No. 122, Douglas county, 270 Pacific Reporter, 120, Wash.

A school-district clerk's signature, if at the end of the contract, is held not binding on the district in the absence of evidence that the clerk was authorized to so bind it. (Rem. complete statutes, §§ 4776, 5825).—Cope v. School Dist. No. 122, Douglas county, 270 Pacific Reporter, 120, Wash.

Minutes of the school district board, signed by the Minutes of the school district board, signed by the clerk, are held insufficient to constitute a contract with the school teacher; the clerk not being shown is authorized to bind the district (Rem. complete statutes, § 5825).—Cope v. School Dist. No. 122, Douglas county, 270 Pacific Reporter, 120, Wash.

The plaintiff having taught school as directed by the members of the school committee not authorized to hire teachers, could not maintain an action for services (Me. public laws of 1917, c. 188, § 7; revised statutes of 1916, c. 16, §§ 55-62).—Michaud v. Inhabitants of St. Francis, 143 Atlantic Reporter, 56, Me.

The plaintiff, hired as a school teacher by unauthorized school-committee members, could not recover for services on a quantum meruit (Me. revised statutes of 1916, c. 16, §§ 55-62).—Michaud

v. Inhabitants of St. Francis, 143 Atlantic Reporter,

### TUITION TEST CASE IN WEST VIRGINIA WON BY PARENT

The supreme court of West Virginia, in a recent ruling against the board of education of Freeman's Creek District, has sustained the suit of Mr. M. T. Gissey, a resident of Freemonsbury, to compel the board to pay the tuition of his two children in attendance at St. Patrick's parochial high school at Weston.

The case was referred to the supreme court for final adjustment in determining whether the school board was compelled to pay the tuition at St. Patrick's High School. The board had contended that it was liable for the tuition of children only if they were sent to a public high school recognized as such by the state board. as such by the state board.

The court, in its ruling, declared that it is the duty of the board in any district which does not maintain a high school, to pay the tuition fees of all pupils in its district who have completed the course of study in the elementary schools, and who attend public high schools in other districts or counties, or other schools of high-school grade in the state.

#### STATE BOARD SUPREME

After having had the case under advisement for several days, Judge Jere West at Crawfordsville, has sustained the demurrers of the attorney general, counsel for the defense, in the case of the board of school trustees of Indianapolis against the Indiana state tax board. The suit was filed by the school officials several months ago. The plaining together the determine the authority of the state. tiff sought to determine the authority of the state tax board in refusing to allow bond issues for the improvement of schools.

The tax board maintained that the bond issue questions were not legal because of the fact that they did not allow competitive bidding. The tax board said that more of one kind of material would have to be provided for before the bond issue could be approved.

In the two demurrers filed by the attorney general, it was alleged that the facts of the case did not warrant a continuance of the action.

Attorneys for the school board asked for an appeal to the Indiana supreme court. This was granted. The case is similar to some others that

have been filed during the past few years in an effort to overthrow the power of the state tax board.

EAW AND LEGISLATION

The State of Texas has adopted an amendment to the constitution whereby the legislature is empowered to create a state board of education. "The opportunity and responsibility given the legislature is the biggest thing that has happened in Texas education circles in fifty years" said S. M. S. Marrs, superintendent of public instruction. "It is empowered to determine whether the members of the board of education shall be elected or appointed, whether that board shall have the power to select the superintendent of schools, the numto select the superintendent of schools, the number of members to constitute the board, their terms of office not exceeding six years, prescribe their qualifications, fix their salary and assign their duties. More than that it can bestow jurisdiction from the kindergarten through the university."

duties. More than that it can bestow jurisdiction from the kindergarten through the university."

WISCONSIN SCHOOL DEPARTMENT DECISIONS

The state department of public instruction of Wisconsin recently gave out the following opinion:

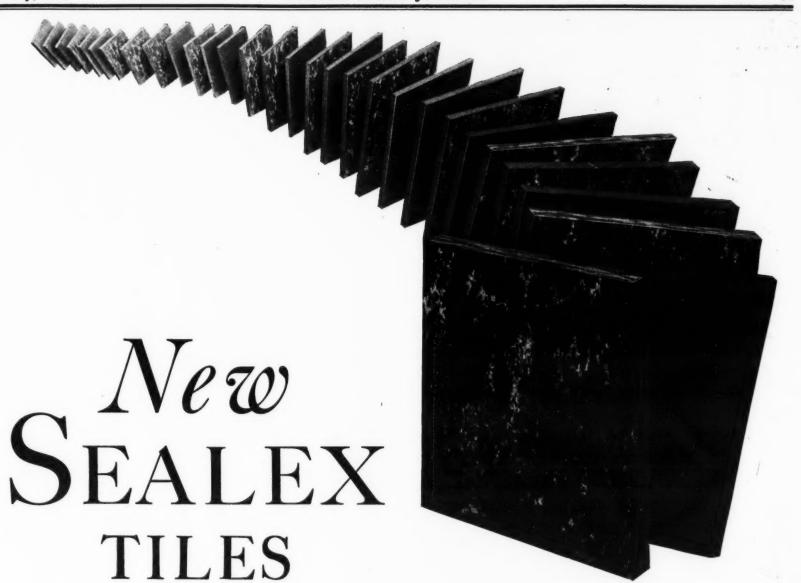
"There is no Wisconsin statute restricting the organization of a fraternity by high-school students. Nevertheless, the board of education has not only full power to deny such privilege to high-school students, but also to make drastic rules and regulations enforcing the denial. Many of the states have statutes relating to this question, and it has been held by the courts that a student belonging to a high-school fraternity subjects himself to expulsion."

—The state education department of Wisconsin has ruled it is the duty of the teacher to notify the board or one of its members, whenever some repair is needed in order that the schoolrooms may be comfortable and free from drafts. Care for the comfort and health of the children is a necessary part of the teacher's contract to teach school to the best of her ability.

The department has also ruled that neither a county nor a city-school superintendent may legally dismiss a teacher from her position. The authority rests entirely in the hands of the school board, and may be legally exercised only at a regularly called board meeting, and by majority vote.

Another ruling of the department is to the effect that pupils may attend social gatherings during the school term. A rule of the board forbidding such

that pupils may attend social gatherings during the school term. A rule of the board forbidding such attendance has been declared unenforceable.

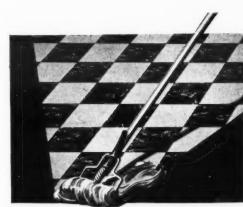


PROGRESS... a constant striving to improve the unimprovable. "No room for betterment here," everyone imagines. Then, suddenly, comes a new model—a new record—a new standard.

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Formerly known as Gold Seal
Tiles, our cork-composition tiles
—since they are now made by the
Sealex Process—will henceforward be
known as Sealex Treadlite Tile and
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#### School Head Tells Why Williams Reversible Windows are STANDARD

School rooms with Williams Reversible Windows are more easily ventilated without drafts. This equipment also allows a substantial saving in window

These are the reasons which Wallace G. Nesbit, Director of Schools of Cleveland Heights, Ohio, gives in a letter explaining why Williams Reversible Window Equipment has been adopted as standard in all new Cleveland Heights Schools. His letter is reproduced at the right.

Williams Reversible Window Equipment will be shown in Space No. 147 at the 59th annual convention of the department of superintendence of the National Education Association in Cleveland Feb. 23rd to 28th.

The Roxboro Junior High School, Cleveland Heights, shown below is one of the latest buildings equipped with Williams Reversible Windows.



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Cleveland Heights Board of Education Oftice of Director of Schools

Clebeland Reights, ..

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Attention: Mr. Karl Domino.

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After an experience of over two years with your reversible sash window, you will be interested to know some of the reasons why we are specifying your window as a standard in all of our new buildings.

I find that the general attitude of both the principals and teachers regarding room ventilation is much more favorable in the rooms where the reversible sash is used. With this sash it is possible for the teacher to regulate the room temperature and ventilation more accurately and without creating a draft on the pupils. This, of course, I consider one of the most important features of your window.

In addition to the regulation of the room temperature, I have found that there is a considerable saving in the cost of window cleaning. With the reversible type of sash it is not necessary for the men to climb on the outside of the windows, fasten and unfasten their belts or climb up and down ladders. The danger of an accident to the men while cleaning windows is entirely eliminated, as all of the window cleaning can be done from the from the inside. There is a saving of from 30 to 50% in both time and labor in the cleaning of windows in the schools where the reversible window sash has been installed over the cleaning of windows in the schools where the old type sash is installed.

These are two of the important reasons why we have adopted reversible sash windows as standard in our

Yours very truly,

WGN: MT

Director of Seneple Fuely

## SCHOOL FINANCE AND TAXATION

#### PER-PUPIL COSTS IN INDIANAPOLIS

Mr. A. F. Walsman, business director of the public schools of Indianapolis, Ind., in a brief report, gives the results of a study of comparative costs for 1927-28 with the average for the previous two years. Actual variation in the costs of items of school administration, instruction, operation, maintenance, and fixed charges over a period of three years since 1925-26 has been slight, according to Mr. Walsman. Teachers' salaries, janitors' supplies, fuel, electricity, and gas are the principal items in which variation has been in an upward direction. direction.

Decreases in administrative cost, in the salaries of janitors and engineers, in water costs, and the costs of building repairs during 1927-28 over similar costs in 1925-26 and 1926-27 have been shown for all schools.

The report shows that, of the elementary The report shows that, of the elementary schools in the year 1926-27, expenditures for janitors' salaries per pupil were least, \$1.66 in School 71, and most, \$12.09 in School No. 11. In 1927-28, School 85 spent least, \$3.04, and School 11 most, \$25.70. Janitors' supplies in the earlier year cost least, \$0.11 in School 20, and most, \$2.17 in School 74; in 1927-28 Schools 60 and 31 spent the least, \$0.10 and School 74 the most, \$3.54 least, \$0.10, and School 74 the most, \$3.54.

Fuel in the earlier period cost least, \$0.97 in Schools 69 and 47, and most, \$5.71, in School 74. In 1927-28, fuel cost least, \$0.76 in School 42, and most, \$7.18 in School 11.

Electricity cost least, \$0.12 in School 28 and most, School 28 and most, \$0.83 in School 32 during the 1926-27 period. In 1927-28, electricity cost most, \$1.31, in School 9, and least, \$0.03 in School 69. Gas was most costly, \$2.30 in School 74, and least costly, \$0.008 in School 33 in the 1926-27 period; in 1927-28 it proved least costly, \$0.002 in School 7, and most costly, \$1.82 in

In 1927-28 the cost of telephones ranged from \$0.04 in Schools 26 and 41, to \$0.58 in School 11. In the earlier period, the cost ranged from \$0.04 per pupil in Schools 26 and 41 to \$1.35 in School 65.

#### Fitchburg, Massachusetts, Ends First Year of Its Retrenchment Program

Fitchburg recently underwent a period of industrial depression resulting in a reduction of the assessed valuation. This was the cause of a retrenchment program which hit the school and all other departments. The school board finished its first fiscal year of retrenchment on December 1. During the past year the school department managed to operate with \$22,000 less than the amount

aged to operate with \$22,000 less than the amount sought in the original appropriation.

The department submitted an original appropriation request for \$506,000, a slight increase over the previous year. Mayor Joseph A. Lowe recommended that, due to reduced income, the department should operate on about \$484,187, which was granted and accepted by the school board. Mayor Lowe also urged a ten per cent reduction in all expenditures. expenditures.

expenditures.

The previous year the department spent \$496,392 so that the greatly reduced budget was entered into by Supt. Ernest W. Robinson with some misgivings. A cooperating factor in keeping expenses down was the reduced attendance which followed the industrial depression. About 100 less pupils were registered in the schools. Some departments were abolished and evening and Americanization schools were closed for two months.

abolished and evening and Americanization schools were closed for two months.

During the year, the school board suspended the sliding scale of salary increases which had operated automatically, with a saving of about \$4,000. Teachers, however, were finally granted a return to their scale, some members of the board feeling that the city was morally bound to continue the plan. The economy program resulted in the resignation of a number of talented teachers and for nation of a number of talented teachers and for

nation of a number of talented teachers and for the most part their positions were abolished.

Superintendent Robinson felt that, while retrenchment for a year would create conditions which progress could not overcome for several years, cooperated with the mayor without seriously disturbing the system. He advised the school board that the retrenchment program was actually in force in full only since September 1. He stated that if it were in force for an entire year about \$50.000 could be saved.

While industrial conditions have improved since

While industrial conditions have improved since a year ago, the city officials do not believe that the effect on the city treasury is such that a complete resumption of the education schedule will not be possible for another year.

BALTIMORE HAS NEST EGG
—Baltimore, Md. At a recent meeting of board in which the school budget for 1929 under discussion, the information was given that in the board's treasury there is a neat little nest egg of \$31,933.52, which neither the city board of estimates nor the city council may touch.

This fund is known as the "intestate fund," which is turned over to the school board by the local exphans, court from time to time and which

local orphans' court from time to time, and which represents the distribution of funds remaining un-

represents the distribution of funds remaining undistributed for want of legal representatives of unclaimed estates. Under the law, it is provided that this money may be used for the schools of Baltimore City. The money never appears in the municipal budget, since the school board may spend it as it pleases, so long as it is used for school purposes. The money is being held against a day when the schools may be in extreme need of funds.

FINANCE AND TAXATION

—The cost of maintaining a pupil in public school is more than two and a half times as great today as it was fifteen years ago, according to a statement issued by the United States Bureau of Education. Back in 1913 the cost of schools, divided by the number of pupils actually attending, showed that \$38.31 annually should be chalked up against each of them. In 1916 the figure had grown to \$49.12, in 1920 to \$64.16. in 1925 to \$98.45, while the latest figure available shows an expenditure per student of \$102.05.

—Colorado Springs, Colo. The total of the budget for the service of the ser

the latest figure available shows an expenditure per student of \$102.05.

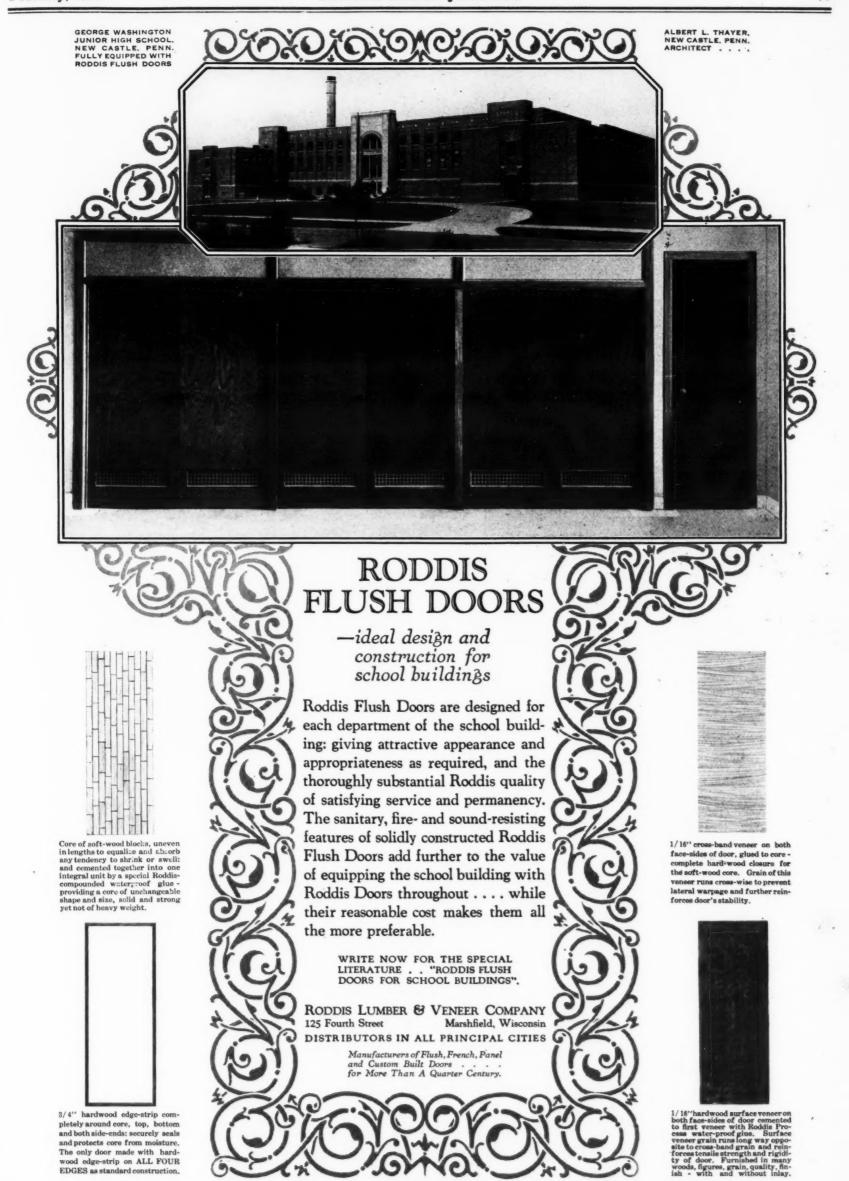
—Colorado Springs, Colo. The total of the budget for the coming year is \$890.504. The sum of \$714,561 will be expended for the operation of the schools, while the remainder will be used to pay interest on bonds and maintenance, to include building, repairs, renewals, and pensions.

Under the heading of maintenance, repairs, and renewals, the expenditures as estimated for 1929, will total \$43,116.75. Of this sum, \$16,000 will be spent on repairs to various school buildings.

—Rockford, Ill. The public schools will be operated during 1929 on a budget of approximately \$1,750,000, or \$100,000 less than the past year. The new north end school, which will be erected at a cost of \$225,000, will have its cost spread over a period of two years.

—Pueblo, Colo. At a recent meeting of the school board, a budget in the amount of \$500,000 was adopted for the school year 1928-29. The budget includes an appropriation of \$20,000 for school-(Concluded on Page 74)

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#### AWNING TYPE WINDOWS EXCEL FOR SCHOOLS



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are hygienically correct. Specially adaptable for the modern needs of school buildings. Recommended and in wide use to meet lighting and ventilating requirements. Sturdy, attractive and economical.

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(Concluded from Page 72)

building purposes. It is the purpose of the board to establish a building fund so that future build-ing operations may be conducted on a cash basis.

—The board of education of Pittsburgh, Pa., has levied a tax of 11½ mills for financial expenses during the fiscal year beginning with January, 1929. Of the total tax levy, 7 mills is for salaries fixed by law, 2 mills is for debt service, and 2.5 mills for all other expenses.

-The school board of Manchester, N. H., during the past school year spent approximately \$793,000 and was able to effect a saving of \$22,000 through the systematic purchase of fuel and supplies under the direction of Asst. Supt. A. J. Gibbons. Through the operation of a central purchasing system, the school system has functioned on a more efficient basis than had been previously, possible basis than had been previously possible.

—The secretary of the fractional school district No. 1 of Marine City, Mich., has issued a report showing a total reduction of \$11,550 in the bonded indebtedness of the school district since December, 1927. At present, there is a total bonded indebtedness of \$24,750, as compared with \$36,300 in December, 1927.

-Upon the request of Mayor Guilfoile, the school board of Waterbury, Conn., has recommended that the entire appropriation of \$241,000 in next year's building budget be transferred to the city to help reduce the city's floating indebtedness. In order to make the transfer legal, it will be necessary to obtain the passage of a special act by the general assembly.

—Davenport, Iowa. The school board has adopted a resolution empowering the secretary to issue \$200,000 in tax anticipation warrants. The secrewas allowed \$15,000 of the amount for current expenses

—More than 200 rural schools, with an enrollment of from one to three pupils each, are maintained at public expenses in Wyoming. The cost for instruction of each child attending such schools is from \$300 to \$1000 a year, as compared with an average cost of \$100 for each pupil attending rural, elementary, and high schools of the state.

—Detroit, Mich. The public school system will require a total of \$31,000,000 for maintenance expenses during the school year 1928-29, according to

estimates of the school authorities. for the operation of the school plant will reach \$24,459,810, to which will be added \$7,000,000 for new school buildings.

The largest item contributing to the increase in the instruction budget is \$900,000 for the employ-ment of 400 new teachers. Increases in teachers' salaries accounts for \$650,000 more, while \$500,000 is for increases in the salaries of janitors and engineers, and for fuel and repair of buildings.

—St. Louis, Mo. President A. A. Blumeyer of the school board has proposed the adoption of a new budget system, permitting the board to carry out its building program and remain within its appropriation. It was recommended that a committee of three be appointed to study the needs of the schools for the next five years and to prepare a five-year budget plan for adoption.

a five-year budget plan for adoption.

—McKeesport, Pa. Mr. E. M. Mack, a member of the school board, has begun an action to obtain a higher rate of interest for the funds of the board on deposit in the six local banks. The board has adopted a resolution, calling for bids from local banks which will guarantee to pay more than the straight two per cent interest now paid by the banks. Mr. Mack called attention to the fact that ten cities in Pennsylvania receive three per cent on school funds on deposit and the Pittsburgh board receives as high as four per cent on time deposits and 2.65 per cent on checking accounts.

—On December 18, 1928, the people of Clarksdale, Miss., voted to issue \$250,000 in school bonds for building a junior high school for white children and a central heating plant, by a vote of \$29 to 21. Clarksdale is a small city of about 10,000 population, including negroes, in the Mississippi Delta. This is the largest school-bond issue ever voted in Mississippi by a city or town of equal size. The ratio of the vote for the bond issue to the vote against it was about 40 to 1 and is probably the against it was about 40 to 1 and is probably the largest ratio by which any school-bond issue in the state has ever been authorized by popular vote.

The election followed more than a year's quiet work by the superintendent and the school officials in preparation for the two weeks' intensive campaign just preceding the election. The measure had the indorsement and support of every member of the school board, and of the outgoing newly elected city commissions. The bankers, professional, and business

men and women of the city were practically 100 per cent for the bonds.

A steering committee of five leading citizens, acting in cooperation with the superintendent, perfected an organization that reached out and touched every profession, business house, church organization, and home in the city. The campaign wound up with a page advertisement and indorsement in the daily paper bearing the signatures of 150 business firms and professional men, who paid for two issues of the ad, and with a big school parade on the day of the election.

On the same day the people voted also to issue \$30,000 additional in bonds to build an addition to the public library, by a vote of 729 to 115.

#### OAKLAND SCHOOLS LOSE CONTROL OF **NEW BUILDINGS**

NEW BUILDINGS

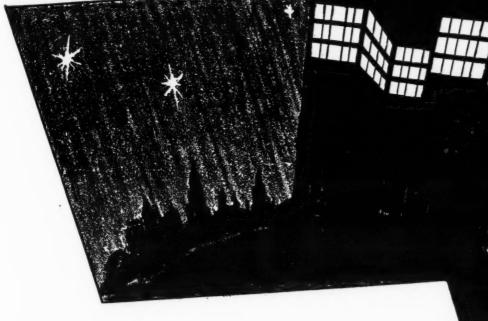
With the \$10,000,000 building program of the Oakland school department completed under the bond issue of 1919, the control of new buildings has again reverted to the department of public works of the Oakland city council.

For the past ten years, while all of the school buildings constructed in Oakland have been built with bond-issue money, the control has rested with the school department heads. A special business department for the schools was inaugurated to administrate the spending of the school-bond moneys. Under the direction of Mr. Don Rice, business manager, a program was launched which resulted in the construction of new schools in every section in the construction of new schools in every section of the city.

Further construction of buildings, however, must have the sanction of the department of public works, of which Mr. Frank Colbourne is commisworks, of which Mr. Frank Colbourne is commissioner. The first construction job under the new system will be the Crocker Highlands School, which is expected to cost approximately \$100,000. Mr. R. T. Williams, building superintendent in the department of public works, is working in cooperation with Mr. Rice and the business department of the school system.

Appointment of an architect to draw plans and specifications for the new building is the first step in the construction of the schools. The matter will come before both the board of education and the city council for authorization of each step of the work.

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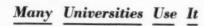
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to conquer darkness. Another great stride forward has been taken in man's efforts to imitate the absolutely perfect light of the Sun.

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(The result of a Nation-wide Survey of Buildings and Schools)

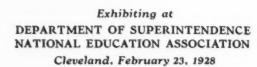
Cloth Towels - - - per 1,000 Dries \$5.00
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## PROPOSED PITTSBURGH SALARY SCHEDULE AND PLANS FOR ITS ADMINISTRATION

The citizens' committee on teachers' salaries of The citizens' committee on teachers' salaries of Pittsburgh, Pa., in a report to the board of education, has presented salary schedules which follow basic principles in salary-schedule making, and which offer definite rewards to those teachers who are rendering superior service to the schools of the city. The three principles upon which the schedules are based are (1) rewards for superior service, (2) salaries that meet living costs, and (3) salaries recognizing superior personnel in principalships. ships.

Schedule A

Under schedule A, providing for a modification of the schedule for teachers now in service, the committee recommends a minimum salary upon entrance to schedule A of \$1,200, and an automatic maximum of \$2,200. The annual increments are to be ten of \$100 each.

The committee recommends that specific salary levels above the automatic maximum be established for teachers who have development at their superior.

The committee recommends that specific salary levels above the automatic maximum be established for teachers who have demonstrated their superior ability and who have attained additional specific qualifications. In order to establish budgetary limits, the committee recommends that not more than 45 per cent of the teachers who have reached the automatic maximum of \$2,200 shall be distributed in the superior teaching levels at any time. The schedule provides for five teaching levels, with a definite salary attached to each level. In salary level No. 1, there is a salary of \$2,400 provided, with 15 per cent of the teachers at the automatic maximum salary; in salary level No. 2, there is a salary of \$2,600, with 12 per cent of the teachers at the automatic maximum salary; in salary level No. 3, there is a salary of \$2,800, with 9 per cent of the teachers at the automatic maximum salary; in salary level No. 4, there is a salary of \$3,000, with 6 per cent of the teachers at the automatic maximum salary; in salary level No. 5, there is a salary of \$3,200, with 3 per cent

of the teachers at the automatic maximum salary. The superior-teaching levels are not a permanent classification for any teacher, and the failure of a teacher to keep up a high grade of work results in a change to a lower salary level.

Each Schedule-A teacher, who has reached the \$2,000 maximum as of June 30, 1928, is to be given a double increment, \$200, beginning with January 1, 1930.

Superior Level Requirements for Schedule-A Teachers in Service. The committee has set up a list of the requirements which teachers must meet in order to qualify for the different superior levels:

Superior Teaching Level No. 1. In this teaching level, the increment from \$2,200 to \$2,400 in the modified Schedule A is open to all teachers whose service is of such conspicuous quality as to justify

service is of such conspicuous quality as to justify the action regardless of the amount of general and professional training which the teacher had at the beginning of service in the system or may have later acquired.

later acquired.

The modified schedule provides for a salary increase of a double increment, i. e., \$200, for every Schedule-A teacher, thereby automatically raising the normal maximum from \$2,000 to \$2,200, it follows that any advance above this normal maximum will not come until after the completion of one year of service at the salary step of \$2,200. The committee believes that teachers who have been in the service sufficiently long to be considered for in the service sufficiently long to be considered for the first step above the normal maximum, who have met all the preparation requirements for full appointment to the system, and who are rendering service of conspicuous quality, should have the recognition involved in the advance from \$2,200 to \$2,400, even though they do not meet the present professional preparation requirements for appointment in the school system.

Superior Teaching Level No. 2. It is recommended by the committee that the increment from \$2,400 to

by the committee that the increment from \$2,400 to \$2,600 in the modified Schedule A shall be open to all teachers whose service is so conspicuous as to justify the action, and who in addition have completed not less than two years of professional training, following the completion of a four-year highschool course or not less than twenty years of satis-

A higher quality of service in the schools.

A higher quality of service is required of teachers who are to be advanced to the \$2,600 level than will be expected of those who are advanced to, or who remain in the \$2,400 level. This is basic in all

promotions beyond the normal maximum of \$2,200. In the judgment of the committee, actual teaching experience may be accepted in lieu of two years of professional preparation beyond the four-year high-school course, in the case of teachers who have rendered twenty years or more of teaching service in the schools, and the quality of whose service is so conspicuously strong that but for the training qualifications they would otherwise receive advancement to this level.

Superior Teaching Level No. 3. The committee

ment to this level.

Superior Teaching Level No. 3. The committee has asked that the increment from \$2,600 to \$2,800 be open to those teachers only of conspicuous service, and who in addition have completed not less than three years of training or preparation beyond the completion of a four-year high-school course. The committee recognizes that in exceptional cases these general and professional training qualifications will have gained in other ways than through accredited courses in institutions of learning. These cases are so exceptional as not to justify ing. These cases are so exceptional as not to justify any increment beyond \$2,600 to the teacher who has

any increment beyond \$2,000 to the teacher who has not met the three-year professional-training qualifications in the recommendation.

Superior Teaching Level No. 4. The committee suggests that the increment \$2,800 to \$3,000, in the proposed schedule be open to those teachers whose service is of a high order, and who in addition have completed four years of training or preparation beyond the completion of an approved four-year high-school course.

high-school course.

high-school course.

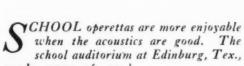
Superior Teaching Level No. 5. The final increment of \$3,000 to \$3,200 in the schedule is to be open only to those teachers whose service is of a conspicuously high order and who, in addition, have completed four years of training or preparation beyond the completion of a high-school course. The committee believes that these two upper levels should be available only for those teachers whose service is so outstanding even in a group of conspicuously strong teachers as to make them clearly service is so outstanding even in a group of conspicuously strong teachers as to make them clearly recognized leaders by practically all with whom they come in contact. In addition, they should have four years of training beyond the high school. The four-year general college course, with baccalaureate degree, is required of teachers in the senior high school.

#### Schedule B

In Schedule B, the committee recommends a minimum salary of \$1,800 upon entrance, with an (Continued on Page 80)



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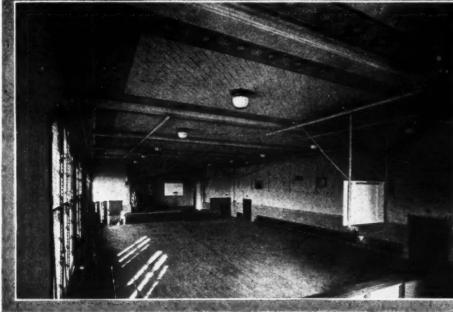
In auditoriums this remarkable material provides correct acoustics . . . makes entertainments much more enjoyable. In gymnasiums and other rooms it quiets noise . . . makes it easier for students to concentrate . . . saves them from the mental slow-down that comes from fatigued nerves.

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CLATTER of dishes and other disturbing sounds in this cafeteria, at Grosse Pointe High School, Grosse Pointe, Michigan, are greatly reduced by the Acousti-Gelotex on the ceiling. Geo. D. Hass, Architect.





HE noise from the gymnasium auditorium at Quarton School, Birmingham, Michigan, is quieted with Acousti-Celotex. Frederick D. Madison, Architect.

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Acousti-Celotex is made in several different types, including BB, which has a sound-absorbing efficiency of 70 per cent—the highest of any material on the market.

The natural tan color and delicate fibre texture of Acousti-Celotex add beauty to any ceiling. And the material can be

the material can be handsomely painted in various colors and designs, without loss of acoustical efficiency.

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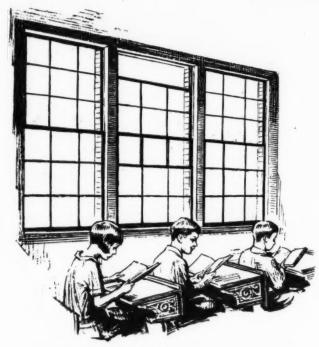
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Industrial Cleaning Materials and Methods

(Continued from Page 77)

(Continued from Page 77) automatic maximum of \$2,850. The annual increments will be six of \$175 each. Upon reaching the automatic maximum (\$2,850) 45 per cent of the teachers who show superior teaching ability will be eligible for entrance to the superior teaching levels

levels.

This schedule also provides for five teaching levels, with definite salaries attached to each level. In salary-level No. 1, there is a salary of \$3,025 provided, with 15 per cent of the teachers at the automatic maximum; in salary-level No. 2, there is a salary of \$3,200, with 12 per cent of the teachers at the automatic maximum; in salary-level No. 3 there is a salary of \$3,400 with 9 per cent No. 3, there is a salary of \$3,400, with 9 per cent of the teachers at the automatic maximum; in salary-level No. 4, there is a salary of \$3,600, with 6 per cent of the teachers at the automatic maximum; in salary level No. 5, there is a salary of \$3,800, with 3 per cent of the teachers at the automatic maximum.

### Superior Level Requirements for Modified Schedule B

Superior Teaching Level No. 1. The committee recommends that the increment from \$2,850 to \$3,025 be open to all teachers the quality of whose service is conspicuously strong, even though in any case the teacher concerned may not have met the training qualifications now required of teachers for

appointment to schedule B positions.

Superior Teaching Level No. 2. The increment from \$3,025 to \$3,200 is to be open to all teachers the quality of whose service is of a high order and who in addition have secured a baccalaureate degree

Superior Teaching Level No. 3. The increment from \$3,200 to \$3,400 is to be open to all teachers, the quality of whose service is conspicuously strong and who in addition have secured a baccalaureate

degree.

Superior Teaching Level No. 4. The increment from \$3,400 to \$3,600 is to be open to all teachers, the quality of whose service is of a very high order, and who have secured a master's degree or its equivalent.

Superior Teaching Level No. 5. The final increment from \$3,600 to \$3,800 is to be open only to such teachers whose service is conspicuously strong who have secured a master's degree or its

#### Schedule C

The committee recommends a minimum salary of \$1,800 upon entrance to Schedule C and an automatic maximum of \$3,200. The annual increments will be eight of \$175 each. A maximum of 45 per cent of those teachers at the automatic maximum of \$3,200 who show superior teaching ability will be eligible for entrance to the superior teaching levels.

eligible for entrance to the superior teaching levels. In salary-level No. 1, there is a salary of \$3,400, with 15 per cent of the teachers at the maximum; in salary-level No. 2, there is a salary of \$3,600, with 12 per cent of the teachers at the maximum; in salary-level No. 3, there is a salary of \$3,800, with 9 per cent of the teachers at the maximum; in salary-level No. 4, there is a salary of \$4,000, with 6 per cent of the teachers at the maximum; in salary-level No. 5, there is a salary of \$4,200, with 3 per cent of the teachers at the maximum.

#### Superior Level Requirements for Modified Schedule C

For salary advancement beyond the automatic maximum of \$3,200 provided in modified schedule C, the committee makes the following recommenda-

Superior Teaching Level No. 1. The committee recommends that the increment from \$3,200 to \$3,recommends that the increment from \$3,200 to \$3,400 be open to all teachers, the quality of whose service is conspicuously strong, even though in any case the teacher may not have met the training qualifications now required of teachers for appointment to schedule C positions.

Superior Teaching Level No. 2. That the increment from \$3,400 to \$3,600 be open to all teachers the quality of whose service is of a very high order and who in addition have secured a baccalaureate degree.

degree.

Superior Teaching Level No. 3. That the increment from \$3,600 to \$3,800 be open to all teachers, the quality of whose service is conspicuously strong and who in additional have secured a baccalaureate degree.

Superior Teaching Level No. 4. That the increment from \$3,800 to \$4,000 be open to all teachers, the quality of whose service is conspicuously strong and who have secured a master's degree or its equivalent.

Superior Teaching Level No. 5. That the increment from \$4,000 to \$4,200 be open to all teachers, the quality of whose service is conspicuously strong and who have in addition secured a doctor's degree.

Owing to the small number of persons listed among the employees and assigned to Schedule D, the committee has not made any recommendations with regard to modifying the schedule.

#### Schedule E

Schedule E

In its recommendations regarding the modification of the present Schedule E for elementary-school principals now in service in the elementary schools, the committee has attempted to make clear the extent to which in its judgment the two factors of training and quality of service should be balanced in the adjustment of these schedules. In applying these same principles to the remaining schedules, the recommendations are as follows:

the recommendations are as follows:

That a uniform increment of \$250 be given to each elementary-school principal in the system. That the salaries of principals in Group A (6-9 units), be fixed at a minimum of \$2,350, and an automatic maximum of \$2,750, the latter to be reached by two increments of \$200 each. All increments beyond the substantial property (27,750) ments beyond the automatic maximum (\$2,750), however, are to be available for those principals whose service is of conspicuous quality and who have completed at least three years of training beyond the four-year high-school course. Principals who meet these standards will be eligible to two additional increments of \$200 and \$250, respectively.

who meet these standards will be eligible to two additional increments of \$200 and \$250, respectively, which makes a maximum salary of \$3,200 possible for elementary principals in Group A.

That the salaries of principals in Group B (10-15 teaching units), be fixed at a minimum of \$2,650 and an automatic maximum of \$3,250, reached by three increments of \$200 each. All increments beyond the automatic maximum, however, are available only for a limited number of principals whose service is of a conspicuously high quality and who have completed at least four years of post highschool preparation. Principals who meet these standards are eligible to a maximum of \$3,600 to be reached by two increments of \$150 and \$200, respectively.

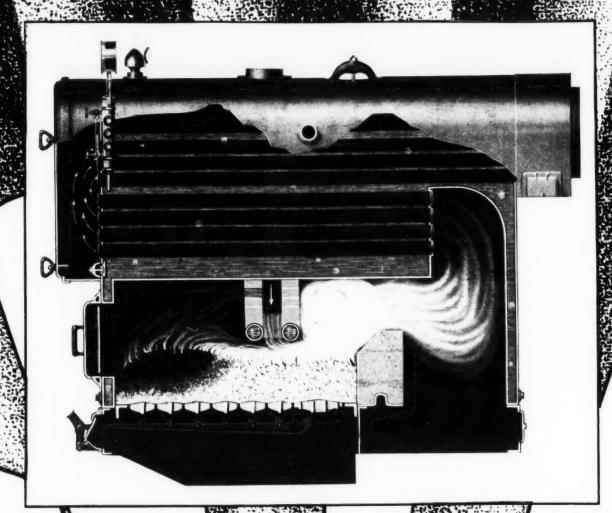
be reached by two increments of \$150 and \$200, respectively.

That the salaries of principals in Group C (16-19 teaching units), be fixed at a minimum of \$3,150 and an automatic maximum of \$3,850, reached by an increment of \$200 and two of \$250 each. All increments beyond the automatic maximum of \$3,850, however, are to be available for a limited number of principals whose service is of a high quality and who have secured a baccalaureate (Concluded on Page 82)

(Concluded on Page 82)

# 

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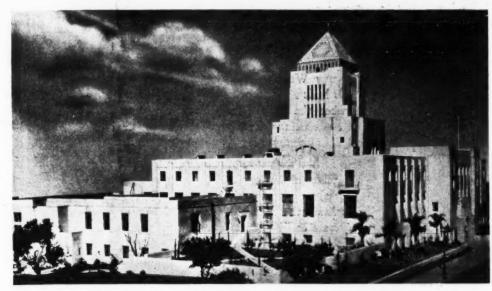
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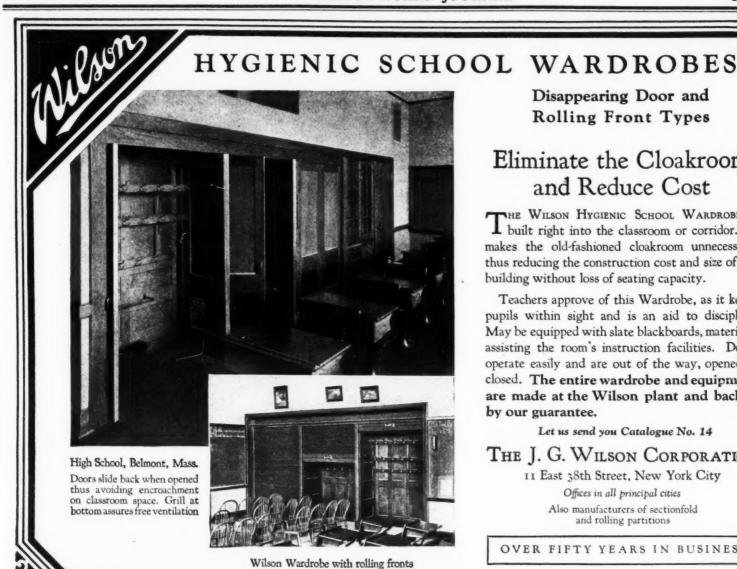
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degree and completed at least one year of graduate work of a professional nature. Principals who meet these standards are eligible to a maximum of \$4,-

250 to be reached by two increments of \$200 each.
That the salaries of principals in Group D (20 teaching units and over), be fixed at a minimum of \$3,850 and an automatic maximum of \$250, reached by two increments of \$200 each. Increments reached by two increments of \$200 each. Increments beyond the automatic maximum are available for a limited number of principals whose service is of a high quality and who have secured a baccalaureate degree and completed at least one year of graduate work of a professional nature. Such principals are eligible to a maximum of \$4,750 to be reached by two increments of \$250 each.

The committee recommends that a possible maximum salary of \$6,000 be available for a limited number of elementary-school principalships for those whose qualifications of leadership and preparation

whose qualifications of leadership and preparation are of such an exceptionally high order as to justify such action.

such action.

Schedule G

In the proposed modification of schedule G for high-school, trade-school, and continuation-school principals, the committee recommends that a flat salary increase of \$250 be granted each high-school principal, thereby raising the minimum salary hereafter to \$4,250 and the automatic maximum salary to \$5,750. The advance to the automatic maximum is to be made through six annual increments of \$250 each. Two additional increments of \$250 each may be open for a limited number of high-school principals whose service is of a high order and who in addition have secured the degree of master of arts. of arts.

of arts.

Finally, it is recommended that a possible maximum salary of \$7,500 be available for a limited number of high-school principals who have demonstrated their ability to be of a conspicuously high order, and who may in addition have secured the doctor's degree.

The additional cost of the schedules of salaries based upon the present number of teachers will total.

The additional cost of the schedules of salaries based upon the present number of teachers will total, in the sixth year of its operation, not to exceed \$758,537. Since the higher teaching levels will not be reached until six years have clapsed, the cost of the five previous years will be considerably less.

NEW PRINCIPALS' SALARY SCHEDULE AT SPRINGFIELD, ILL.

The board of education of Springfield, Ill., has adopted a new principals' salary schedule, which

is to become effective in July, 1929. The schedule provides for annual increases of \$100 and maximum salaries for the possession of master's degree and bachelor's degree. Principals having bachelor's and master's degrees will receive annual increases after 1928-29. Principals having less than a bachelor's degree will receive increases only upon condition that a five-semester hour residence course be completed in an approved normal school, colbe completed in an approved normal school, college, or university. The schedule is as follows:

teachers and substitutes will receive \$3 per evening, subject to such preliminary training courses and volunteer credit work in the evening schools as the superintendent may prescribe. After one year's experience in the public schools, approved elementary teachers will receive \$4 per evening.

—Springfield, Mass. A special committee of teachers has been appointed to work with the salaries' committee of the board of education in a study of the salary situation. The action is the

Years' experie	1	2	3	4	5	6	7	
Group I	A.B.	\$2.200	\$2,300	\$2,400	\$2,500	\$2,600	\$2,700	\$2,800
300-450 pupils	M.A.	2,300	2,400	2,500	2,600	2,700	2,800	
Group II	A.B.	2,300	2,400	2,500	2,600	2,700	2,800	2,900
450-600 pupils	M.A.	2,400	2,500	2,600	2,700	2,800	2,900	
Group III	A.B.	2,400	2,500	2,600	2,700	2,800	2,900	
600 pupils or over	M.A.	2,500	2,600	2,700	2,800	2,900	3,000	

Two years of experience in excess of the eligibility requirements will be allowed in placing a principal requirements will be allowed in placing a principal on this schedule providing such experience has been gained after the applicant received his bachelor's degree. To illustrate, this means that the beginning salary in a Group I school cannot be more than \$2.400 for the principal who has a bachelor's degree or \$2,500 for one with a master's degree.

Under the rules of the board, principals in elementary schools who are appointed from outside

mentary schools who are appointed from outside the city, must have a bachelor's degree, with a major in education from a college, normal school, or university. The principal must also have had at least three years of successful experience as a school administrator.

#### TEACHERS' SALARIES

—Pittsburgh, Pa. The superintendent of schools has prepared a regulation covering a change in the regulations governing evening-school teachers and salaries.

their salaries.

Under the new rules, it is proposed that new or first-year teachers and substitutes in the evening high schools shall receive \$4 per evening. High-school teachers with one year's experience will receive \$4.50 per evening. High-school teachers with two or more years' experience will receive \$5 per evening. This salary rate will apply to teachers of trade training chorus orchestra and advanced trade training, chorus, orchestra

citizenship, in the elementary schools.

In the elementary schools, new or first-year

first step in the effort of the women high-school treachers to obtain equal pay for equal work. The general policies and the principles to be established by the committee as a result of its findings, will be made available to the teaching staff and the

general public.

—Waterbury, Conn. The board of finance of the municipal government has incorporated in the 1929 budget an appropriation for the proposed service salary increases, which it is expected will become effective next September. The action of the board is a result of a united campaign on the part of the Waterbury teachers' association, the principals'

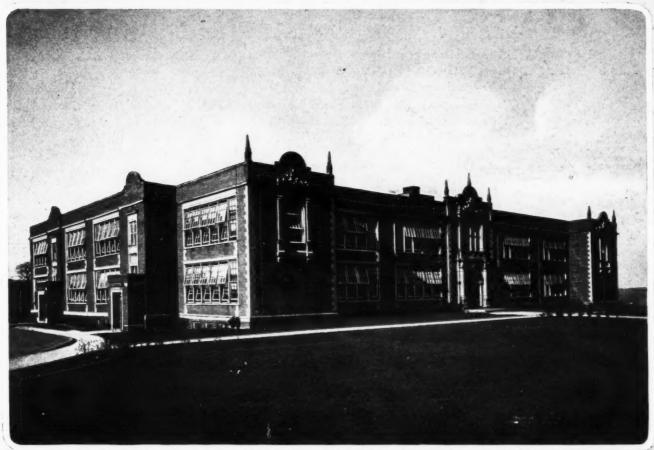
is a result of a united campaign on the part of the Waterbury teachers' association, the principals' association, and others, who led in the fight of the teachers for a service salary increase.

The system provides for a total salary appropriation of \$29,908, with annual increases amounting to \$17,998 and service increases of \$8,660. It provides that the amount instead of increasing yearly will decrease, with the result that in three or four years, the yearly increase will be almost back to the normal figures. Although the amounts are not large, the number of teachers affected by it the first year will be 391.

—New Britain, Conn. The school board failed to

—New Britain, Conn. The school board failed to comply with a request of the teachers' council for increased compensation for teachers with M.S. degrees for the reason that the salaries could not prepared in time for the budget for next year. The plan involved ten teachers and a total cost of \$2,000.

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#### NEW ST. LOUIS RULES

—The school board of St. Louis, Mo., has revised its rules governing tuition fees for nonresident pupils. The revised rules read as follows:

Pupils who are residents of Missouri, but live outside the City of St. Louis, may be admitted to such schools as are not crowded upon payment of tuition as follows: tuition as follows:

For the elementary schools, \$75 per year, for the regular term, and \$10 for the summer

For the high schools and intermediate schools, \$160 per year, for the regular term, and \$15 for the summer term.

For the vocational schools, \$200 per year, for the regular terms, and \$15 for the sum-

mer term, or part thereof. For the schools for the deaf, \$260 per year. for the regular term, and \$35 for the summer term.

for the schools for physically handisapped, \$260 per year, for the regular term, provided the board of education be placed at no expense for transportation of such pupils. For open-air schools, \$250 per year of 12

e-2)For other special schools, \$250 per year, for

the regular term.
Tuition for nonresidents in the evening schools shall be \$15 per evening-school year, payable \$7.50 in advance for each term or any part thereof.

Nonresident teachers (who are residents of Missouri) may be admitted to the extension courses of the Harris and Sumner Teachers' Colleges, provided their admission does not require increases in accommodations or teach-The tuition for such nonresidents shall be \$10 for each fall and each spring term and \$20 for the summer term.

All tuition fees are payable quarterly in advance at the office of the secretary and treasurer of the board of education, without further notice. In cases in which tuition is payable quarterly,, the principal of the school having such pupils shall, on the first day of the quarter, report to the secretary and treasurer of the board a list of such pupils belonging to his school at that time. If the tuition due is not promptly paid, the secretary and treasurer shall notify the superintendent of instruction to that effect and the latter shall suspend such pupils from attendance until all tuition due is paid. The secretary and treasurer shall notify the principal of the school when the tuition fee has been paid been paid.

#### **NEW RULES**

The New York City board of education has stricken out its former rule on discipline and substituted therefor the following: "No corporal punishment shall be inflicted in any of the public schools, nor punishment of any kind tending to cause excessive fear or physical or mental distress."

—Jacksonville, Ill. The school board has adopted a rule which authorizes principals to require the physical examination of boys before they are permitted to participate in competitive

permitted to participate in competitive

The school board has adopted -Clarinda, Iowa. new rules and regulations to govern the public use of school buildings for community activities. The rules read as follows:

The superintendent of schools shall be in charge of all schedules for night use of buildings.
All authorized activities of the high school and

junior college may be carried on without additional janitorial expense.

Requests for use of the buildings shall be made at the superintendent's office at least 24 hours be-fore the meeting, except in extreme cases.

The custodian of the building being used will be responsible for injury to school property.

The custodian will receive his authority from the superintendent to open the buildings for any

Community organizations operating without profit may use the building only on approval of the superintendent.

The custodian of the building will be present and have authority to exclude anyone violating rules of good conduct.

The custodian will see that all windows and doors are locked after each meeting.

—The board of education at Pittsburgh, Pa., has ruled that pupils shall not be permitted to leave the buildings during lunch periods, without a written excuse from their parents, for permission to lunch periods.

ten excuse from their parents, for permission to lunch elsewhere. Principals of the schools are required to see that the rule is enforced.

—Everett, Mass. The school board has revised the rules governing the schools. Under the new rules, the general direction and management of athletics in the high schools will be in the hands of a committee composed of the subcommittee on high schools, the chairman of the school committee, the superintendent of schools, and the principals of the junior and senior high schools.

Another rule provides that the acceptance of

Another rule provides that the acceptance of election by a janitor constitutes an agreement that he shall reside in the city during the term of his employment. Removal of residence from the city will be sufficient cause for removal from the posi-

## RULES FOR THE EXTENDED USE OF SCHOOL BUILDINGS The board of education of Sioux City, Iowa, on

October 15, adopted rules governing the extended use of school buildings.

Under the rules, it is required that there be an agreement between the board of education and the agreement between the board of education and the heads of all organization to insure that in case of damage to school property, the particular organization shall be held responsible and shall pay for the damage. No group will be allowed in the buildings without their leaders, and the janitor of the building must send home any leaderless group fifteen minutes after the time set for the group to meet.

If the leader of a group is habitually late, or late for three times, the organization will be denied the use of the building until the leader is changed. Janicors must report to the principal the following morning on the matter of breakages or damages, whether the leader was present, and whether he was on time.

The leader of each group will be held strictly accountable for the conduct of those in his charge and for any damage done by them. The janitor is regarded as the representative of the board and is the regular caretaker of the building.

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WRC Washington	KSTP Minneapolis
(11:30 to 12)	KVOO Tulsa
WHAM Rochester	WFAA Dallas
WOAI San Antonio	KPRG Houston
WSMB New Orleans	WHO Des Moines
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—Saugus, Mass. The action of the school board in dismissing Mr. Archibald Coldwell from the principalship of one of the schools has again been upheld by the state supreme court. The court dismissed a new petition in behalf of Mr. Coldwell, asking that the previous decree be entered to compel his reinstatement. The latest petition stated that the opinion given by the court for Saugus averred that Alden Loring was illegally a member of the school board which refused Mr. Coldwell a relection for another term as principal of the Roby School. The court refused to disregard the original decree and the case will now be appealed to the full decree and the case will now be appealed to the full bench of the supreme court.

bench of the supreme court.

—Minneapolis, Minn. The school board, by a vote of four to three, recently refused to permit the installation of busts of Charles Lindbergh in the schools. The action was taken for the reason that the board members felt that the schools should not immortalize living persons. The proposal to install the busts had its inception with the Lindbergh Memorial Commission which sought in this manner to perpetuate an ideal and to keep the aviator's ideal constantly before the students.

—Berkley, Mich. The rule of the school board compelling the teachers to live in the school district, which a few months ago led the teachers to threaten

compelling the teachers to live in the school district, which a few months ago led the teachers to threaten a strike, has apparently been won. The board has announced that all but seven of the teachers now live in the district. Fifty have moved in during the past few months. Five of the teachers were excused from moving, and two accepted other positions.

The teachers had previously opposed the order of the board, asserting that they could not move to the village because of inadequate accommodations. The board replied by vigorously denying the charge.

—Wichita, Kans. The board of education has announced that the position of assistant superintendent of schools will shortly be established. The new appointee will be a supervisor of intermediate and high schools and will work under the direction of Supt. L. W. Mayberry.

—Clinton, Iowa. The school board has co-

operated with the city council in efforts to solve the problem of traffic control and to remove the hazards to students of the junior high school.

—Mr. Z. S. Leymel has entered suit against the school board of Fresno, Calif., to compel the board to pay his salary as an instructor in military training at the local high school. The California teachers' association has recently come to Mr. Leymel's assistance, offering to assist in defraying any expenses involved in carrying the case to the higher court, and in securing an adjustment of the legal tangle involving his dual position as assemblyman and teacher. and teacher.

and teacher.

It appears the main issue in the case is the definition of the limits in the term "state employment" in regard to the application of the constitutional amendment prohibiting legislators from holding any other office, trust, or employment under the

ing any other office, trust, or employment under the state government.

—San Francisco, Calif. In response to the demands of the teachers for increased salaries, the board of education has appointed a citizens' committee, which is composed of Mr. H. U. Brandenstein, Mr. Bruce Cornwell, Mr. James Mullen, Mr. Fred Dohrman, Jr., and Mrs. S. G. Chapman. The committee has engaged Mr. H. P. Melnikow as its expert and has assigned to him the task of making a study of teachers' salaries. In supplementing the study, the teachers have employed Dr. Frank Hart and Dr. L. H. Peterson of the education department of the University of California to make a study of of the University of California to make a study of teachers' salaries.

teachers' salaries.

—Ex officio school boards, created by the Illinois general assembly, and empowered with authority to change the boundaries of school districts, have been held unconstitutional by the state supreme court in a case appealed from Dupage county. The court, in its opinion, held that "unlimited power to be exercised in accordance with whim or caprice of public officials is inconsistent with our system of government".

—Maywood, Ill. The Proviso Township high-school board has created the office of business man-

ager. The new appointee who will begin his duties next September, will be given charge of the board's financial affairs, particularly the purchase of school supplies and the accounting and distribution of school funds.

supplies and the accounting and distribution of school funds.

The board has taken steps toward the selection of the proper man for the position which will carry a salary of \$4,000 per annum.

—Pittsfield, Mass. By a vote of six to four, the school board has asked the city authorities to assign the care of school buildings and grounds to the school board in 1929. This work was formerly in charge of the board of public works, in whose hands it has been since 1907.

It appears that prior to 1907, the school board had been in charge of the school buildings for a period of years. Then it was decided to place the responsibility in the hands of the board of public works, in the belief that the work could be more economically administered.

—Darien, Conn. The school board has adopted regulations governing the use of the high-school athletic field. Under the rules, the athletic field may be used for community purposes when not needed for school activities. On other occasions, deserving local organizations may have the use of the field for amateur athletics, pageants, and other activities, without cost, except for a deposit fee of \$5. This fee is returned to the organization using the field provided it is left in the condition it was when it was taken over for use. The deposit fee is for the protection of the school board in case it becomes necessary to clean up the field and put it in proper shape.

—The Alabama state board of education has

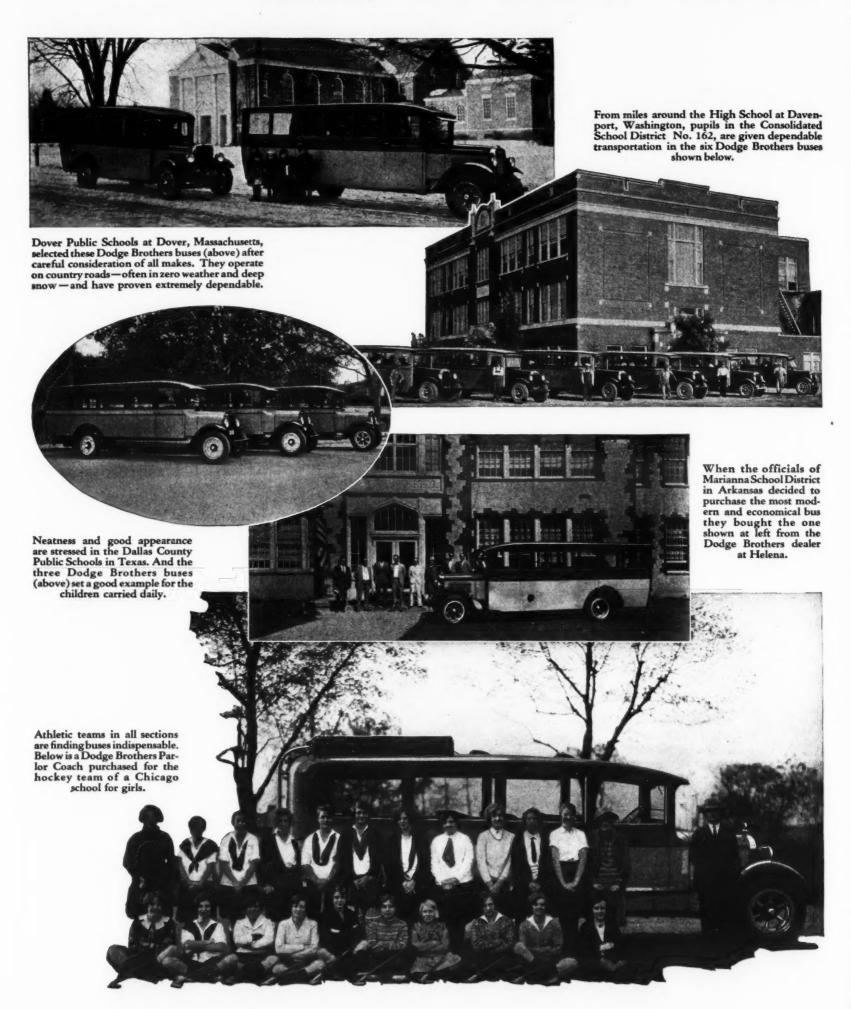
shape.

—The Alabama state board of education has adopted a report of the course-of-study committee, which reduces the number of textbooks to be purchased from 67 to 38 for the first six grades. Additional texts, if used, must be provided by school libraries, without cost to the pupils. The order becomes effective with the opening of the fall term in September, 1929. With this order, the reduction in the cost to patrons of the schools, of textbooks for the elementary grades, has been cut to \$19.81, as compared with approximately \$40, a reduction of more than 50 per cent.

The maintenance of public-school libraries, where additional texts, if used, will be available to pupils free of charge, will give assurance of an adequate

(Continued on Page 90)

# Carrying Children and at Low Cost



# Safely, Dependably Everywhere—



St. Johns Military Academy at Delafield, Wisconsin, uses the Dodge Brothers Utility Bus (left) for its various athletic teams. Glee clubs, debating teams and musical organizations can be handled similarly.

#### Formerly Graham Brothers Buses

The complete line of Trucks, Buses and Motor Coaches which Dodge Brothers have been manufacturing and selling under the name of Graham Brothers now take the name of their makers— Dodge Brothers.

These Trucks, Buses and Motor Coaches have always been powered by Dodge Brothers engines. For years they have been built of Dodge Brothers parts in Dodge Brothers plants according to Dodge Brothers standards.

These Trucks, Buses and Motor Coaches are sold, as they always have been sold, by Dodge Brothers Dealers everywhere.

Twenty-three of the fleet of buses in the service of Detroit's Public Schools are shown below. Dodge dependability and economy keep the fleet growing from year to year.

Regis College, girls' school at Weston, Massachusetts, had to have a bus in harmony with the fine appearance of the school itself. The Dodge shown below was purchased.





The satisfactory performance of the veteran sent officials to the Dodge Brothers dealer at Allentown, Pennsylvania, when South Whitehall Consolidated Schools needed another school bus.

See the Dodg: Brothers School Buses at N. E. A. exhibit in Cleveland, Auditorium-Annex, Spaces 332-4 and 362-4

# Dobe Brothers School Buses

SOLD BY DODGE BROTHERS DEALERS EVERYWHERE

## See This Sanymetal Installation at the

Cleveland Convention

IF YOU are attending the Cleveland Convention of the National Education Association in February, you are invited to visit Booths 42 and 43 at the display in the Public Auditorium, where Sanymetal partitions and other products will be displayed.

Sanymetal toilet partitions are also installed in the Public Auditorium building itself, so that you can conveniently inspect these partitions under actual service conditions.

We shall be glad to welcome you to this exhibit, and to make you acquainted with Sanymetal Products.

The Sanymetal Products Co., 1705 Urban Rd. Cleveland, O. Cleveland Public Auditorium Herman Kreglius Architect. Hunkin-Conkey Co. Contractors

(Continued from Page 87)

—An amendment of the school code of Pennsylvania has been prepared by the committee on schools of the Philadelphia board of education for submission to the state legislature. The amendment provides a leeway of one-half mill in the tax-levying power of Pennsylvania school districts of the first class. With such provision which, in the case of Philadelphia, will add more than \$1,500,000 annually to the school revenues, there will be ample funds to advance the salary schedules of the various teaching groups.

teaching groups.

—Rock Island, Ill. The board of education conducts its own bookstores. Each school building has a definite room for handling school books and

—During the year 1929 the division superintendents of Virginia will be chosen in a different manner from that formerly employed. Under the new ner from that formerly employed. Under the new constitution now in effect, division superintendents in the several counties and cities will be appointed by the local school boards from a list of eligibles furnished by the state board of education. Between 200 and 400 persons will present their qualifications as candidates for the position of division school superintendent. The following minimum requirements have been adopted to govern the aprequirements have been adopted to govern the ap-pointment of these division superintendents:

pointment of these division superintendents:

1. Graduation from a standard four-year college with at least fifteen hours in professional training and two years of practical experience as school principal or supervisor, or five years' experience as a teacher or

2. Graduation from a standard four-year college with degree of B.S. or A.B., with four years' experience as school principal or supervisor, or six years' experience as teacher and

3. General administrative ability as evidenced by practical experience in business or in the busi-

by practical experience in business or in the business administration of education.

4. The college training or experience of the applicant shall have been within a period of ten years from the date of the application for a super-

years from the date of the application for a superintendency.

—Over the protests of the Pasadena board of
education, the board of supervisors of Los Angeles
county, California, recently granted the San Marino
school district the right to annex a portion of the
Pasadena school district. The area in question is
a part of the city of San Marino, having been
annexed to that city in 1924, prior to which time
it was county territory. The annexation was very it was county territory. The annexation was very

much desired in order to make the school boundary of San Marino conform with that of the city boundary on the north, and to enable her to legally provide for transportation of students from the section in question to the San Marino school where most of the children attend.

Through the annexation of this section, there will be a loss of approximately \$9,000 per year in taxes to the Pasadena city-school district, but the loss will not be felt until next year since the tax bills are already out. The tax pate in Paradena in bills are already out. The tax rate in Pasadena is \$2.11, while that in San Marino is \$1.97 per \$100 of assessed valuation.

of assessed valuation.

—Philadelphia, Pa. The school board recently approved a \$3,000 increase in the annual salary of Supt. E. C. Broome, as well as increases in the salaries of all members of the superintendent's staff, including assistant superintendents, district superintendents, and department heads. The

Associate superintendents, first year, from \$5,000 to \$6,000; second year, from \$5,500 to \$6,500; third year, from \$6,500 to \$7,500; and fifth year, from \$7,000 to

Changes in the schedule for district superintendents are: First year, from \$4,500 to \$5,000; second year, from \$4,750 to \$5,750; third year, from \$4,750 to \$5,750; fourth year, from \$5,250 to \$6,250; fifth year, from \$5,500 to \$6,500.

—Columbia, Mo. The school board has passed a rule providing that a pupil who is absent from school one day preceding or following a holiday, shall forfeit all claim for credit for the quarter in which such absence occurs. An exception is made in the case of an absence which is excused by the faculty in joint session and approved by the super-

—Columbia, Mo. The school board has ordered that one-way traffic signs be placed in the driveway of the Hickman High School, and that the driveway be closed to all but school vehicles. The action was taken to protect the children arriving or leaving the school grounds. ing the school grounds.

—St. Louis, Mo. Three of the four members of the school board, whose terms expire next April. will become candidates to succeed themselves at the spring election. The members whose terms will expire are A. A. Blumeyer, president of the board, Louis A. Schollmeyer, Henry Heier, and Ben Weidle.

The board of education of Minneapolis, Minn., has adopted a rule, which requires that all remaining fraternities in the schools must disband. Failure to disband means the suspension or dismissal of pupils from school. The rule ends a four-year controversy over fraternities.

—Mansfield, Ohio. The school board has adopted a recommendation providing that principals of buildings in which a cafeteria is maintained, shall report to the board the expenditures and the balance or board. ance on hand. Principals must also account to the board each month on all school activities where money is collected.

-Clinton, Iowa. The school board has adopted a rule that janitors be required to obtain per-mission from the business manager before opening the high-school building or any room for entertainments. Arrangements for the use of the auditorium or classrooms must be made in advance

torium or classrooms must be made in advance with the business manager.

—Council Bluffs, Iowa. The school board is continuing its campaign against fraternities in the high school. A total of 16 students were expelled from school since November because of membership in a fraternity. It is estimated that at least 35 other students face expulsion because of their membership.

membership.

—The state supreme court of Ohio has ruled that Mr. C. L. Snavely may take his seat as a member of the Stark county board of education, and has refused a plea of the school board seeking a reversal of the ruling of the Stark county appellate

It appears that Mr. Snavely was not allowed to sit on the board, due to the fact that he was alleged to be a teacher at the time. The board held that no teacher could be a board member and Mr. Snavely brought suit to gain possession of his seat on the board. Mr. Snavely resigned as a teacher after his election, serving as a substitute until the end of the term.

-Ashley, Ohio. The members of the school board and their wives were given a dinner by the eighth

—Sullivan, Ill. The school board was host to the high-school teachers, their husbands and wives, at a Christmas party and banquet, held at the township high school on December 5. Following the banquet, presents were presented to those in attendance. Entertainment was provided in the school gymnasium.





Gymnasium, Waukegan (111.) High School

Shattuck ಆ Layer, Architects, Chicago

BLOXONEND embodies every quality that the school official desires in a gymnasium or shop floor. It is handsome in appearance, comfortable under foot, quiet, fast, smooth, and easily cleaned.

The tough end grain forms the surface, insuring long life and eliminating the splinter hazard.

This flooring is susceptible to any desired finish. Gymnasiums floored with it may be utilized for games, dancing, gymnastics, and community functions without marring the appearance of the surface or affecting its durability.

WAUKEGAN TOWNSHIP HIGH SCHOOL
ATHLETIC ASSOCIATION John W. Thalman, Superic WAUKEGAN, ILLIA MEMBER CHICAGO SUBURBAN LEAGUE Carter Bloxonend Flooring Co. 332 So. Michigan Avenue, Chicago, Ill. March 31, 1927 Gentlemen:

I am pleased to say that the Bloxonend Flooring in our the highest degree.

This Flooring not only makes one of the fastest basket-in the physical education work. I will at any time be glad to show anyone you may bring with you our entire plant, especially our new gym floor.

200 Prominent School Architets specify Bloxonend for Gymnasiums and school shops. Write for Descriptive Booklet "B".

Visit our Booth No. 269 at the Exhibit of the Department of Superintend-ence, Cleveland,

CARTER BLOXONEND FLOORING COMPANY

Kansas City, Missouri. Branch Offices in leading cities.

with the tough end grain up. It comes in 8 ft. lengths with the blocks dove-tailed endwise onto baseboards.



Lay's Smooth Stay's Smooth

.22 ft. by 30 ft.

#### The Evolution of the Public-School Plant

Arthur B. Moehlman, Professor of School Administration and Supervision, University of Michigan

#### Ninth Standard Type

The second step in the evolution of the Pattengill plan was the adoption of the E-shaped or open-court type of building known as the Duffield plan. This plan was used completely in building during 1921-22 and in building first units for the Guyton,1 Hosmer,1 and Courville schools.

The feature of this type was the entire elimination of the basement. These two-story buildings start at grade level. Other changes consist of refinements in room development. All special rooms are on the first floor, the home rooms on the second. Since the complete unit is operated as a 48-section school, there are two

<sup>1</sup>Type plan changed when additions were later added.

auditoriums, two gymnasiums, and a small library for the younger children.

The ultimate and complete plant under this plan provides accommodations for 2,240 children under the platoon organization, approximately 80 children in special classes and 240 in the kindergarten, 2,240 in all.

If built in sections, the first unit comprises 12 classrooms and kindergarten; the first and second sections, 18 classrooms and kindergarten; the first three sections, 20 classrooms, kindergarten, library, auditorium, gymnasium, and teachers' restroom; the first four sections, 23 classrooms, kindergarten, sewing room, wood shop, art studio, two gymnasiums, two auditoriums, library, and administrative quarters. An open-air unit may be constructed on the third floor. The accommodations in the entire unit would be as follows:

2	Special rooms	ft.	by	30	ft.
ĩ	Kindergarten and toilet	It.	БУ	30	It,
2	Girls' toilets				
	Boys' Toilets				
	Janitor's room	24	h	20	
4	Science rooms	ft.	by	30	II.
2	Music rooms	ft.	by	30	ft.
2	Art rooms22	ft.	by	30	ft.
1	Sewing room22	ft.	by	30	ft.
	Medical Department (Clinic)	24	h	90	
1	Manual Training room	ft.	by	44	It.
1	Children's library22	ft.	by	28	ft.
1	Administration department				
	Auditorium32				
1	Auditorium	It.	by	31	ft.
î	Girls' lockers and showers19	ft.	by	29	It.
ī	Boys' gymnasium40	ft.	by	60	ft.
1	Physical Directors' Dept.		-		-
1	Lunchroom	ft.	by	26	ft.

#### Second Floor

	opeciai room	9 9 9 1	 	0 0 0 0 1	 o constant I	L. UJ	00 11
2	Girls' toilets						
2	Boys' toilets						
1	Teachers' toile	et					
1	Teachers' roo	m	 		 22 1	t. by	40 ft
1	Boys' play re	of.	 		 40 1	t. by	60 ft
1	Girle' play re	not.			40 4	th har	60 64

#### Third Floor

)	Classrooms						 	 ٠					 	 		22	ft.	by	28	ft.
L	Classroom						 							 		22	ft.	by	44	ft.
	Boys' toilet																			
	Girls' toilet																			
l	Janitor's re	0	m																	
	Teachers' r																			
l	Sun room .			 										 		22	ft.	by	60	ft.
l	Dining room	m			٠	0	. 1	,			,			 		22	ft.	by	32	ft.
1	Kitchen											9		 		13	ft.	by	22	ft.
l	Clinic																			

Along with changes in building construction have come developments in school furniture. The old desk, screwed to the floor, is gradually giving way to a movable type, better adjusted to modern classroom instruction and to the physical needs of the children, and adjustable for either reading or writing activities. In the lower grades the influence of the kindergarten has been felt, for the informality of tables and chairs has replaced the uncomfortable stationary seat.2 The general idea in the evolution of classroom furniture has been to develop types that would aid materially in the modern socialized recitation and in group activity.

<sup>3</sup>In 1910 Dr. Kuhn, president of the board, advocated the removal of standard elementary seats and the substitution of tables and chairs as better adjusted to the needs of the children.

#### NEW HIGH-SCHOOL SUPERVISION PLAN IN WISCONSIN

(To Be Continued)

During the past two or three years, a definite attempt has been made to formulate and promote a state program of high-school supervision in Wisconsin. The idea has been to enlist the cooperation of all agencies in the state concerned with the improvement of high-school teaching. It has been recognized that no single institution can do this task alone, but that all must work together toward a common end.

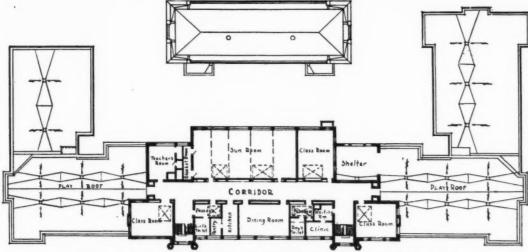
ward a common end.

In order to provide the means by which these different agencies may function cooperatively, a Wisconsin teacher-training council has been formed, representing these organizations. The various bodies included in the council are the state department of public instruction, the University of Wisconsin, the state normal colleges, the private colleges of the state, the county rural normal schools, the state teachers' association, the city superintendents' association, the county superintendents' association, and the high-school principals' association. The purpose of the council is to formulate a program for teacher training in Wisconsin, both for service and in service. The council has no legal standing and its only authority will be based on sound educational principles.

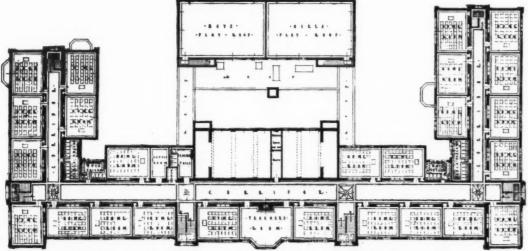
sound educational principles.

It is the purpose of the council to collect the results of research, together with the best practice in all states and to make them available for use in Wisconsin. It is planned to direct, to correlate, and to integrate all the diverse activities of teacher training in the state and to formulate them into one coherent and efficient program.

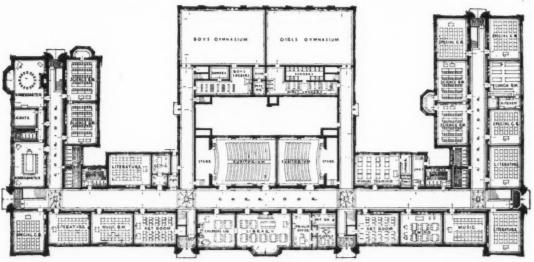
The supervisory conferences which have been held for the past two years have proved their value and will be continued. It is hoped that through them it will be possible to push forward the state program of high-school supervision already begun.



THIRD FLOOR PLAN, DUFFIELD ELEMENTARY SCHOOL, DETROIT, MICH.



SECOND FLOOR PLAN, DUFFIELD ELEMENTARY SCHOOL, DETROIT, MICH.



FIRST FLOOR PLAN, DUFFIELD ELEMENTARY SCHOOL, DETROIT, MICH.

# heirs a remarkable record of attendance



because the floor beneath their feet is warm, dry, resilient, clean

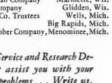
Your retail lumber dealer can furnish MFMA Maple, Beech or Birch flooring, or he can get it for you. Members of the Maple Flooring Manufacturers Association are:

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Let our Service and Research Department assist you with your flooring problems. . . Write us.





Tired little muscles—chilled little bodies—"colds" and absences—how often they are simply the result of damp, rigid, stone-like floors!

More and more, school board members are coming to realize the wisdom of flooring schools with the one flooring material that combines warm, dry, cushioning comfort with the qualities of lasting wear which school use demands. Northern Hard Maple!

This resilient flooring material is remarkably tough-fibred and tightgrained. It does not sliver or splinter. Scuffing, youthful feet and the moving of equipment simply

make it smoother with time. Northern Hard Maple actually outwears stone!

Maple, moreover, because of its permanent smoothness, is exceptionally easy to keep clean. It offers no open lodging places for dust and germ-laden dirt to collect. And it permits quick, simple, permanent anchorage for seats.

Hundreds of school boards have been guided by these facts in selecting flooring. They have chosen Maple for schoolrooms, corridors, gymnasiums, assembly halls. Consult your architect about Northern Hard Maple.

MAPLE FLOORS IN COLOR—By a new special staining process—the Marietta-Murphy Finishing System—Northern Hard Maple Floors may now be given a variety of beautiful, lasting color finishes. Standard finishes as follows:

BARLY AMERICAN

AUTUMN BROWN

DOVE GRAY ROYAL BLUE

PASTEL GREEN

Write for free booklet, "The New Color Enchantment in Hard Maple Floors"

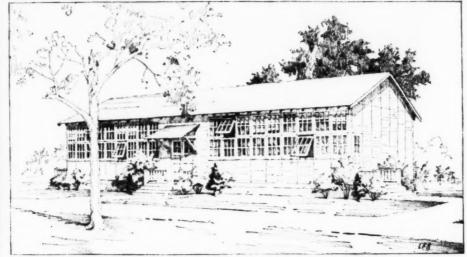
MAPLE FLOORING MANUFACTURERS ASSOCIATION

1780 McCormick Building, Chicago, Illinois

The letters MFMA on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trade-mark is for your protection. Look for MFMA it on the flooring you use.

## Floor with Maple





## Stronger, Airier, Insulated Buildings for Ever School Housing Need

Circle A Schools and Gymnasiums provide attractive quarters for any size of student body—at a reasonable cost and in a very short time. For instance: 4 men erect the one-room school in five days. Other buildings "go up" correspondingly as fast. Circle A walls are insulated—four layers thick. They keep out heat, cold, and noise. C Circle A Buildings are reinforced at every three feet and at all four corners. They are truly more rigid than most frame buildings. And, last but very important—Circle A Buildings are handsome substantial structures that can stand with pride in the most expensive company. Send for interesting details. No obligation.



Typical Gymnasium

CIRCLE A PRODUCTS CORP. 600 S. 25th St., Newcastle, Ind.





ESSENTIALS OF A SCHOOL BUDGET In defining a budget, J. H. Holst of the Junior College located at Modesto, Calif., says: "A budget is a systematized statement of the expected income and the currently available resources, and of the planned expenditures for a stated time, of an individual or of a cooperating or civic group. An individual may budget his resources of time, physical strength, and intellect, to be expended on his various activities and interests, or he may make a limited or par-

tial budget of such resources and expenditures." In pointing out the utility of a budget he says: "A budget when properly made and administered is a most effective instrument. It provides authority, places definite responsibility, emphasizes relative values, organizes procedures, and promotes constructive administration. The preparation of a budget requires a knowledge of the source, and of the amount of resources and income."

Mr. Holst then proceeds to define the several essentials of a school budget, as follows:

1. A sound budget cannot be prepared, presented, and administered except under an honest and intelligent administration, nor can such an administrative organization function without an honest budget. The principles which govern budgetmaking are identical with or complementary to the principles which govern scientific

2. The careful budgeting of resources tends to reveal their amount and value. The individual who stops to canvass his resources usually finds them to be either greater or less than he had supposed them to be, and so it is in a civic unit. There can be no intelligent or economical use of resources until their amounts and limits are comprehended.

3. Therefore, the preparation of a sound budget required that the relative values of activities claiming support shall be considered, not once for all, but at each budgetmaking period. The relative value of a thing which has become customary or traditional is very likely to escape notice, and so is that of something new which happens to receive popular acclaim. Examples may be found in almost every city, county, or state government, but they are especially evident in the more financially independent schools and colleges.

4. A budget which provides oversupport for certain enterprises, however valuable they may be, is as faulty as one which fails to provide adequately. Oversupport, even though it does not rob others, at least encourages waste and efficiency. "Come easy, go easy" applies here as well as to the average private individual in the use of his funds.

5. The budget should represent an honest effort to determine income, and to apportion The padded it according to accepted principles. budget is a lie, since it is padded with the expectation that it may be cut and it, therefore, calls for more than can be justified. This more often occurs when more than one budget is competing for the available funds. That is one reason why the budget should be inclusive of all the activities for which the funds are available.

The budget should be planned with sufficient insurance against emergencies. That is not a budget which may be thrown out of order by any one of a number of possible events, nor is it any better if it provides a big reserve which may later be distributed to activities which have taken a chance. Provision for amendment similar to the procedure by which the original budget was prepared and adopted seems to be the best and most economical insurance.

7. There must be full publicity for the

budget. Every taxpayer and patron of the schools should be permitted to know both what is proposed and what is approved. It is often said that the people in general take no interest in such matters, and that they do not understand when they do so. This is all the more reason for full publicity in such a form that those who so desire may understand.

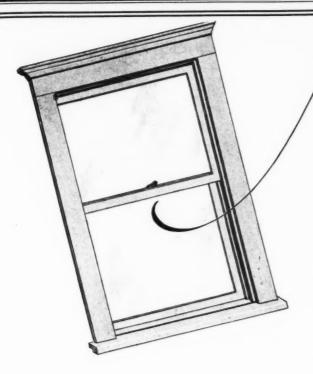
8. The superintendent should be responsible for the preparation of the budget in such form, and accompanied by such information regarding sources of revenue and required expenditures, that the board of education can act upon it with a clear understanding of all of its provisions.

#### BOARDS OF EDUCATION

-Wilkes-Barre, Pa. The Wilkes-Barre town-ship school board has been entirely reorganized with the appointment of the new members to take the places of those removed by the court. The new members comprise John Shinal, Paul Hanahan, John Dailey, John Keniszal, Frank Kuren, Stanley Kerpet, and Ellisworth Davis. Two of the members were appointed for five years, two for three years, and the others for one year each.

-The court recently granted an injunction re-straining the Ashley Borough school district and the tax collector from collecting as taxes for the the tax collector from collecting as taxes for the current year, more than seventeen mills, instead of the 27-mill levy fixed by the school board. The injunction was requested by the taxpayers who held that the millage fixed by the school board would raise \$20,000 in excess of the budget requirements.

-Senator Kinney has refused to present a bill in the Missouri legislature to have members of the in the Missouri legislature to have members of the board appointed by the mayor. He suggests in place of this, a bill to permit each of the two major parties to nominate half of the number of board members to be chosen at each election. The new plan, according to Mr. Kinney, would be to place the responsibility for the personnel of the board and the conduct of the schools directly upon the two dominant parties. He pointed out that appointment of the members by the mayor would take the authority from the hands of the people and would and toward centralization of government.



## Perfectly Good Window

Why not use it?

Windows are put in school buildings

1. To admit Light

2. To aid in Ventilation

Interference with these two important functions should not be tolerated

## Draper Adjustable Window Shades

Obstruct Glare and Aid in Ventilation

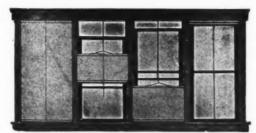
Top light is the most valuable light that comes through a window, and it is the light that you may enjoy at all times if your windows are equipped with Draper Adjustable Shades. When the sun shines full against the pane, light without glare can only be obtained when your shades are adjusted to diffuse the direct rays, admitting at the same time the all-important top light. Draper Adjusable Shades are an important aid to ventilation through win-

dows. With Draper Shades, windows may be lowered from the top so as to permit an overhead circulation of air, without draft, and without the obstruction or flapping characteristics of the ordinary shade.

A recent bulletin published by the U. S. Bureau of Education says in reference to window shades; "The only entirely satisfactory device is the adjustable fixture whereby any desired part of the window can be covered."

The Draper Adjustable Window Shade is the logical answer to the specifications laid down by the Bureau of Education. It effectively prevents glare yet admits a maximum amount of light and does not interfere with ventilation.

The principal features of the Draper Adjustable Shade are patented, and while the idea of the original adjustable shade has been imitated, the Draper remains today the only entirely satisfactory device.



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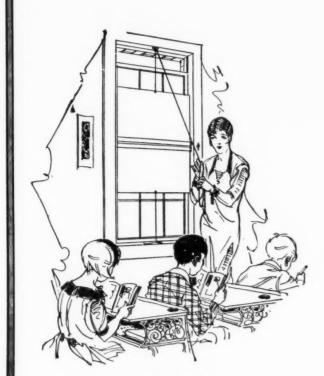
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MAXWELL'S "AIR-AN-LITE" DOUBLE ROLL SHADE PATENTED.

## BUILDING NEWS OF THE SCHOOLS

#### SAN DIEGO COMPLETING PROGRAM

-San Diego, Calif. The school-building program —San Diego, Calif. The school-building program is being rapidly carried out with the assistance of the bond issue of \$2,313,000 approved by the voters last May. Of the total amount, \$325,000 has been used in acquiring the present site of seventeen acres and buildings of the state teachers' college, the latter having moved to a better location.

Of the remaining amount, \$998,000 is being expended for new elementary buildings, additions, and itself. Even elementary buildings, additions, and

sites. Four elementary buildings are planned, each costing \$150,000, and the balance will be used in the erection of additions to present buildings and

sites.

A total of \$990,000 is being spent in expanding the secondary-school plants. An additional senior high school is being erected, at a cost of \$400,000, and an additional \$400,000 will be spent for additions to existing high schools. New sites and playgrounds will be provided at a cost of \$90,000 and a fireproof warehouse at a cost of \$90,000.

It is expected that all of the 26 building projects will be completed by September, 1929. Some of the smaller buildings will be ready for occupancy with the opening of the spring semester of the current school year.

school year.
THREE JUNIOR-HIGH-SCHOOL BUILDINGS

THEE JUNIOR-HIGH-SCHOOL BUILDINGS FOR LOS ANGELES

The Los Angeles board of education is carrying out a pretentious building program, in spite of the defeat of the city's \$31,000,000 school-bond issue last June. A continuous expansion of housing facilities is made necessary by the constant increase in population, which now is estimated at more than 1 1-3 millions.

Three new junior high schools, each costing approximately \$350,000 and accommodating 1,200 students, are to be built and completed in time for occupancy at the beginning of the next school year. The Bancroft school will be located in Hollywood and will be a brick and stone structure designed by Hunt and Burns. In addition to the main classroom unit of two stories, there will be a cafeteria and domestic-science building, auditorium, shops, and gymnasium. and gymnasium.

The Bret Harte school is to be situated in a new

The Bret Harte school is to be situated in a new district in the southwestern part of the city. The style of architecture will be modern Gothic, the principal building materials brick and stone. The architects are Krempel and Erkes.

The Audubon school will serve an industrial district. The exterior finish will be stucco, the roof of red tile. Two low, round towers in the main building will be a distinctive feature. A. S. Nibecker, architect for the board of education, has prepared the plans for this school. the plans for this school.

### THE BUILDING PROGRAM OF THE EL PASO SCHOOL SYSTEM

Repairs and improvements......

New rooms for present deficiencies..... 95,000 200,000 ...\$1,876,250

For new rooms to accommodate present half-time classes, and to replace present rooms which are unsuitable for classroom purposes, the sum of \$200,000 is allowed and \$95,000 for repairs and improvements.

ments.

For the secondary projects of the schools, an additional sum of \$723,750 has been provided for use if required, it being recognized that several hundred children of compulsory school age are not in any school, and others of school age are not in attendance, also for a large number of kindergarten age for whom there are now no accommodations.

### SCHOOLHOUSING PROGRESS IN NEW JERSEY

NEW JERSEY

The state education department of New Jersey has issued a report showing that there was an increase of 14,743 pupils, or 2.0 per cent over that for the school year ending June 30, 1927. To house these 753,753 pupils, there were 2,300 school buildings, of which 56 were rented. Thirteen more school buildings were reported for the school year 1927-28 than for 1926-27. In these 2,300 school buildings, 21,520 classrooms, which is an increase of 1,330 classrooms over the previous year, were provided. During the past school year, 42 new buildings with

466 classrooms were completed, and 58 buildings were enlarged or remodeled.

were enlarged or remodeled.

The report shows that the city districts owned, exclusive of portables, 524 school buildings, of which 453 are elementary, 24 junior high schools and 47 high schools, with a total seating capacity for all types of buildings of 411,441 with median seatings for elementary junior high schools and high schools of 37, 35, and 31 respectively. This is an increase of 7,420 seatings over that reported for October 1, 1927. The increase in October, 1928, was 373,699, which was an increase of 2,911 over that for the same time last year. Nine cities had larger enrollments this year than the number of seatings in buildings exclusive of portables owned by the district. During 1927-27 there were 29,399 pupils on part-time as compared to 21,971 in 1926-27. The number on part-time was 27,917, which was an increase of 901 over that for October, 1927. Of the 16 city districts having part-time classes, only 9 concity districts having part-time classes, only 9 constructed new buildings or additions during the year in order to relieve the conditions. In 1927-28 there were 11 new buildings and 16 new additions constructed, with a total seating capacity of 12,828.

#### BUILDING NEWS

—Pasadena, Calif. The new public school ware-house of the board of education was occupied on November 15. The warehouse is one of the most modern of school warehouse buildings on the Coast and cost approximately \$60,000.

and cost approximately \$60,000.

—The new senior high school at Madison, Ind., was dedicated on December 14. The building is strictly modern and was financed through a local holding company.

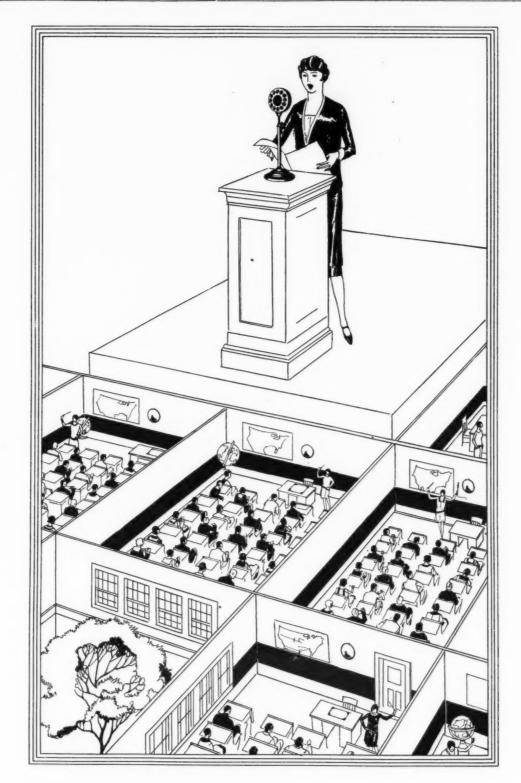
—The citizens of Beaver Falls, Pa., in November, approved a school-bond issue of \$350,000 for a senior-high-school building. The action completes a definite campaign for better educational facilities carried on by Supt. Floyd Atwell.

—Danbury, Conn. The school board has adopted a scale of prices for the use of the auditorium in high schools. A minimum price of \$10 will be made

high schools. A minimum price of \$10 will be made to cover the janitor and policeman's fees and incidentals.

-Davenport, Iowa. The school board has begun condemnation proceedings to obtain possession of certain property needed in connection with its \$450,000 school-building program. The architects have begun work upon the plans for the three buildings which are to be erected.

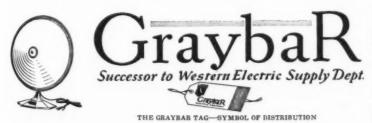
(Continued on Page 98)



SUPPOSE all the classroom walls could be removed at once and all classes gathered together as if in one big room . . . . Physically, this may be impossible but it is in effect just what can be done through the Western Electric Public Address System.

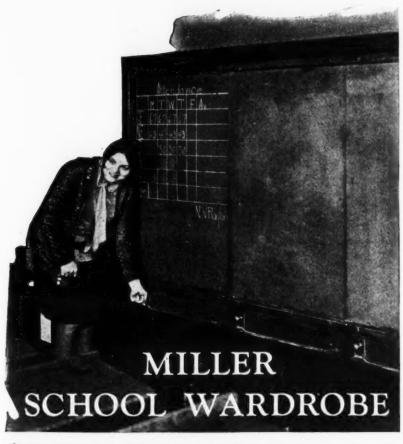
A loudspeaker in every room brings over the voice of the music teacher, the commands of the gymnasium instructor, the music of the school band or the morning address of the principal.

And how clearly! The reputation and experience of the maker are guarantee of that. Western Electric has been engaged for two generations in just such problems involving sounds and sound transmission. For further information address Graybar Electric, distributor of Western Electric products. One of our distributing houses is nearby. Offices in 71 principal cities.



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ADDRESS.....



### **Pupils** Can't Steal 'Cause Teacher Has the Key!

Wraps, books and lunches are safely locked in the Miller School Wardrobe when Teacher closes the Master Door and locks it.

The Master Door opens or closes ALL doors simultaneously.

ONE KEY and ONE LOCK on the Master Door locks or unlocks all the doors at once.

Hooks and pigeon holes inside the Wardrobe provide adequate storage space. Genuine Bangor slate blackboards on the outside of the wardrobe doors utilize the wall space.

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It is expected that bids will be received about the first of the year on the \$175,000 bond issue. The bond issue of \$75,000 will be delayed until later in the year.

—The only school building in Palm Beach county, Florida, not damaged by the September tornado, was the one Rosenwald school in the county, nado, was the one Rosenwald school in the county, a three-room school built according to plans of the Rosenwald Foundation. During this period, a total of 333 school buildings were destroyed, and all the remaining buildings were damaged. The Rosenwald School was built of heavy framing, with storm sheathing, subfloor and good foundation built of solid concrete tied to the sills. The Rosenwald Foundation has recently authorized an additional advence to assist in rebuilding the pages schools. allowance to assist in rebuilding the negro schools of the county on a stormproof basis.

—Troy, Ill. The citizens recently approved a school-bond issue of \$70,000 for a new high school.

—Winona, Minn. A new auditorium-gymnasium was dedicated on December 19. The building which includes an auditorium, a gymnasium, and a swimming pool, accommodates 1,100 students of the junior and senior high schools. The building is the final unit in a group of three buildings, and was erected at a cost of \$300,000.

The building was planned and erected under the supervision of Mr. William B. Ittner of St. Louis, assisted by Mr. B. J. Knowles, associate architect of Winona. The contractors were the Standard

Construction Company of Minneapolis.

—Dallas, Tex. The board of education has asked the city commission to approve a bond issue of \$500,000 for six new school buildings and for the of the school improvement program. The proceeds of the bond issue will be used for the erection of 18-room buildings on the Mills, Lee, and Knight

school grounds.

—Port Arthur, Tex. The school board has four new schools in process of erection, and plans are under way for the erection of a fifth building. The buildings were planned and erected by Mr. Mark Lemmon, architect, of Dallas, Tex., and were financed with the proceeds of a bond issue of \$1,500,-

—Youngstown, Ohio. The school board plans the erection of two grade schools during the year 1929. Even with the erection of new schools each

year, the board finds it necessary to retain portables to keep pace with the increase in enrollment.

At present, the board is using 39 portables to take care of 1,600 students and 39 teachers.

—The school board of Atlanta, Ga., has con-

sidered a recommendation of the contract committees and the bond commission for the award of contracts for ten school buildings, totaling more than \$600,000 in cost. The contracts had previously been awarded by the board of education and approved by the city council.

—Lynchburg, Va. The school board has appointed a special committee to study the need for addi-

—Lynchburg, Va. The school board has appointed a special committee to study the need for additional schoolroom accommodations. A new building is planned to replace the Biggers School.

—The Kingman Grammar School at Kingman, Ariz., occupied its new building following the holidays. The new building will be a help in meeting the problem of school accommodations due to an increase in school attendance.

—The voters of the Lake Norden school district at Lake Norden, S. Dak., approved a school-bond issue of \$30,000. The school board will immediately begin preparations for the sale of the bonds.

—Wellsville, Mo. The voters approved a school-bond issue of \$22,000. The proceeds of the bond issue will be used to enlarge the high school.

—Sheldon, Tex. The voters of School Dist. No.

Sheldon, Tex. The voters of School Dist. No. 32, have approved a school-bond issue of \$20,000 for a new school. Arrangements will be made for the sale of the bonds, the entire proceeds of which will be devoted to the erection and equipment of the building.

—The citizens of Clayton, Mo., on December 11, approved a school-bond issue of \$545,000 by a vote of 756 to 55. The proceeds of the bond issue will be devoted to six major projects, comprising the replacement of the Forsythe School, the enlargement of the Bellevue School site and playground, the completion of the DeMun School, the erection of the new Glenridge School, the erection of a high-school new Glenridge School, the erection of a high-school cafeteria and addition to the high school, and the purchase of a future high-school site.

The cost of carrying the total bonded indebtedness, including bonds outstanding and the new issue, is estimated at 15 cents on the \$100 for the sinking fund and 20 cents on the \$100 for interest. The total cost of 35 cents on the \$100 compares with the present tax of 25 cents for the same purposes.

It is believed the bond issue will not raise the tax rate more than 10 cents on each \$100 of the valu-

—Fresno, Calif. The school board has recently completed a school-building program, involving an expenditure of \$1,800,000. With the completion of this program, the city now has six new elementary schools and two high schools, as well as additions and improvements to the school plant. All of the construction work was completed under the supervision of Mr. E. J. Fan, superintendent of school buildings. buildings.

—The school board of Decatur, Ga., has adopted a policy of purchasing school sites in advance of the need for the buildings. In line with this policy, the board recently purchased some property adjoining one site, and also acquired a new site for another school.

—The board of education of Decatur, Ga., has named one of the schools the Bibb School, in memory of Mr. W. A. Bibb, a deceased member of the board. Mr. Bibb was active in securing the erection of the building.

—The citizens of Port Neches, Tex., recently approved a school-bond issue of \$50,000 for a school in the Grove addition. At a subsequent bond sale, the bonds were sold to a banking firm in Dallas, at a substantial premium. The architects of the build-ing are Messrs. Livesay & Wiedmann of Beaumont.

-Chico, Calif. The first four-room unit of an eight-room modern school building has recently been completed by the board of education. The building was financed by a special tax and is paid for. The special tax for this school amounted to \$40,000.

—Detroit, Mich. Mr. Charles L. Spain, deputy superintendent in charge of school-building construction, has announced that the board will expend approximately \$8,307,323 for new buildings during the next year. The present expenditure is \$3,000,000 higher than would appear necessary, but Mr. Spain points out that the mayor and city council had previously reduced the building item to \$2,125,000, so that if the original request of the board had been granted last year, they would only be asking \$3, granted last year, they would only be asking \$3,500,000 for new schools this year. As a result of the reductions last year, the board has found it necessary to carry over into the new budget the \$4,875. 000 which was eliminated from last year's budget.

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Quietness is the latest feature of Lyon Steel Lockers—a quietness in corridor and locker room that increases efficiency in school room and gym. Lyon Steel Lockers became a national standard through outstanding features of design, construction, locking mechanism and appearance. Add, now, Lyon's method of attaining quietness through the use of rubber silencers and you have another incentive for buying Lyon Steel Lockers ... Lyon Steel Lockers are not the only Lyon Equipment for school use. Write us about your steel storage equipment needs—just mentioning the type of equipment you wish.

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CATALOG ON REQUEST

(Concluded from Page 98)

7

—Milwaukee, Wis. Through the issuance of bonds and direct taxation, the school board has received \$11,324,000 for school-building purposes during the next five years. The bond issues total approximately \$6,580,000, while the balance, \$5,244,000 will come from the mill tax allowed by the legislature.

During the year 1929, the board will issue bonds totaling \$1,160,000, which, with the mill tax, will provide a total of \$2,104,000.

provide a total of \$2,104,000.

—Minneapolis, Minn. Supt. W. F. Webster has presented to the school board, plans for a five-year school-building program, calling for an expenditure of \$6,343,000. The building program provides for the erection of two senior high schools, seven grade schools, also the completion of two high schools now under construction, and the enlargement of four elementary schools. The program for 1929 provides \$1,172,000, covering half the cost of the Washburn High School and the completion of the Henry Junior High School. High School.

-Wellsville, Mo. The citizens recently approved a school-bond issue of \$22,000 for additions to the present school facilities. Construction work on the addition to the high school will begin in the spring and the building will be ready for use in September.

—A total of six new school buildings were occupied at San Francisco, Calif., during the fall term. Five of the new units have a capacity of 1,000 or more pupils, while one has a capacity of 600 pupils.

—North Little Rock, Ark. Construction work has begun on the new high-school building, which is to be completed in September, 1929, at a cost of \$500,000. An addition to the S. A. Jones High School has been completed at a cost of \$25,000. The Rosenwald Foundation has approved an application for aid in the amount of \$2,100 for this building.

—Cleveland, Ohio. One senior high school and two six-year high-school buildings have been given precedence in the new 1929 school-building program of the board of education. The construction work will in large measure solve the housing problem for elementary schools by transferring students who have continued their advanced work in the elementary buildings.

—Youngstown, Ohio. The school board in adhering to its policy of two new schools each year, has completed plans for two new grade schools during the year 1929. In the face of increased accommoda-

tions, the board is retaining the 39 portables in use for the last ten years. At present there are 25 basement rooms in general use, while portables and basement rooms take care of 1,600 students and 39 teachers.

—At a recent session of the Alabama state board of education, Dr. George D. Strayer of Columbia University, presented a report in which he recommended an expenditure of \$2,000,000 for a school-building program covering the next three terms of four years for the state normal-school exercise.

—Drastic tax increases, to be borne jointly by the cities of the state, are recommended in the school reorganization plan of the Missouri teachers' association which is to be presented at the next session of the state legislature. The plan seeks to guarantee the same educational facilities to children of rural Missouri as those of the urban centers, trebling the school fund appropriations where necessary.

The plan will require an expenditure of approximately \$12,000,000 for the support of the educational program, an amount equal to that expended for all purposes of state government.

In the drive on the legislators for more money for the rural schools, the teachers will ask that the state set aside from its revenue 60 per cent of the entire receipts, instead of the 33 ½ per cent now appropriated. Heavy increases in state taxes will be necessary to support the program, which looks to the final preceipt of the little and school because in to the final passing of the little red schoolhouse in Missouri. The association recommends an increase in the general tax, the income, and corporation franchise taxes.

The purpose of the tax increases is to guarantee to every school child in the state at least eight months of schooling each year. Each school district is to be guaranteed ample transportation facilities, four-year high schools for each community, and an adequate school-building program to be aided by state school funds.

—Shawnee, Kans. The Shawnee Mission High School teachers and the school board have asked the school district for \$350,000 in new bonded indebtedness to provide three times the present school plant. The bond issue is intended to provide for a large addition to the school.

-Winfield, La. The Calvin school district recently carried a school-bond issue of \$55,000 for

the erection, repair, and equipment of school buildings in the district.

—Carrollton, Mo. The school board has taken steps toward the calling of a school-bond issue of \$140,000 for the erection of two new grade schools.

—Eylan, Ark. The school district will vote on

a bond issue of \$10,000 for a new school.

—Joplin, Mo. The school board will shortly retire \$41,000 in school bonds for the general repair and construction of school buildings. Of the total, \$26,000 were retired on January 1, and \$15,000 on February 1.

—Spring Lake, Mich. The school board has called for the resubmission of the question of a \$110,000 school-bond issue for an addition to the

-Bridgman, Mich. The school district recently approved a school-bond issue of \$43,000 for an addition to the school building.

—Aberdeen, Wash. At an election held in November, the citizens approved two school-bond issues by a vote of four to one. Of the total, one of \$175,000 is for a new site and a twenty-room grade building. The remaining of \$75,000 is for additional land, building, and equipment in another section of the city.

### SCHOOL PLANT AT EVANSVILLE VALUED AT MILLIONS

The school plant at Evansville, which is the city's biggest business, represents an investment of millions of dollars, and is a model of efficiency. Its cost of operation approximates a million and a half dollars annually and its stockholders number close to

There are 20 school properties in Evansville with an aggregate value of \$5,445,822. This value does not include the worth of the land on which the buildings are situated. Each of the building units is conducted by its own manager, and all are under the direction of the president and the board of directors.

During the ten months of the year that the schools operate, there are from 650 to 700 persons on the payroll, most of them teachers. The average pay for teachers and principals is \$170 per month.

The school plant at present consists of three high schools, each of which is valued at more than \$500,-000, fifteen elementary schools, and a stadium.

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# What Locker Equipment For Your School?

THE MEDART Company was a pioneer maker of steel lockers for school use. Medart Steel Lockers are in use in schools the country over . . . some installations being small; others consisting of several thousand lockers. Each Medart installation is planned to meet the individual needs of each case.

Medart Steel Lockers are made in many sizes and in various types—the Medart Steel Locker line has been built from experience to meet every need of the school locker room.

What locker equipment for your school? The Medart line offers you the equipment to specifically fit your needs. And you will find the Medart organization happy to advise with you out of their unusual experience.

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Medart Steel Locker Catalog showing the various types of steel lockers for school use sent on request.

GYMNASIUM CATALOG—Send for the Medart Gymnasium Apparatus catalog.





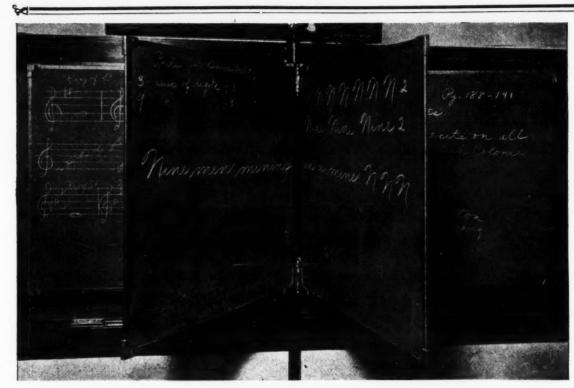
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A sincere and cordial invitation is extended to all School Officials to visit the Medart exhibit at the N. E. A. Convention in Cleveland. Our exhibit will be located in booths 240 and 241.





## LTERNATORS in**SCHOOLROOMS**

Ask for our new sixteen-page booklet, show-ing pictures of the Alternator as installed and in use — to-gether with informative and

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"We'd like very much to have your Alternator Swinging Blackboards in our schoolrooms," writes a principal from Ohio—"but our building is old, and we don't understand how you place this new type of blackboard in an old building. Will the wall support an Alternator?"

The picture shows the answer. A "Pipe Type" Alternator should be installed in old schoolhouses, with the swinging blackboards swung from an enameled pipe mounted against the wall and extending downward to the floor. Thus the floor carries most of the weight of the Alternator—275 pounds. And schoolrooms which might otherwise be denied the convenience of this new-type swinging blackboard may have it!

Teachers love the Alternator! It's a great aid to them in

Teachers love the Alternator! It's a great aid to them in their work. Placed at the front of the room, just behind the teacher's desk, it works like a giant book—four "leaves"

of eight "pages"—giving the teacher eight individual black-boards on which to write exercises and test questions. Eighty-four square feet of blackboard space, convenient to handle and display to the class!

With The Alternator, the teacher may prepare her black-board lessons in advance and thus save time during the school period. The lessons and tests need not be exposed to the scholars until the proper time. To swing the boards in any position, the teacher merely gives a gentle push. The board moves freely, and stands in place at any angle where stopped.

angle where stopped.

The Alternator saves time, enabling the teacher to keep lessons from day to day. It is easy to handle, as there is nothing to lift. And there is nothing to get out of order, for the patented swinging device always works perfectly! The cost is amazingly low.

#### The Utah School Transportation Survey

The state school authorities of Utah have com-The state school authorities of Utah have completed a careful study of the school transportation situation. The cost in 1923-24 was \$263,605, and in 1927-28 it ran up to \$403,468. This rapid increase led Supt. C. N. Jensen to invite a special committee to make a study, with a view of establishing legitimate costs and the most desirable methods of transportation of school children. An elaborate questionary was worked out and distributed to the several districts.

The total number of children in grades of one

The total number of children in grades of one to eight conveyed to and from school in 1927-28 was 6,472, at an average cost of \$25.51 per pupil. The total of nine to twelve grade pupils conveyed was 5,172, at an average cost of \$30.72. The grand total of all pupils carried was 11,644 pupils, and the average cost was \$30.72 per pupil. The report says that the difference in the size and weight of

elementary and high-school pupils prompted the committee to deal with them in separate groups.

While 1,509 pupils were carried by railways, and 1,349 by wagons and private rigs, a total of 8,581 was carried by automobiles. In commenting on the side of things the committee says:

"The cents per pupil-mile, which is after all per-haps the best unit of calculation, is obtained by dividing the total daily cost of a group by the number of pupil-miles of said group of pupils. For example, were the bus driver on the route just For example, were the bus driver on the route just described above under a contract to haul said pupils for \$40 per month or \$2 per day, divide 200 cents by 78 pupil-miles and you get 2.56 cents, which is rather a high rate for the school to pay and at the same time rather a low contract price for the driver. The question next arises: Is it possible to re-route the district, or make better provision with private rigs or in some other way? This is a case on the border line of deciding one way or the other. It should be studied carefully before a decision is made.

"The cost per pupil per year is another factor

"The cost per pupil per year is another factor which cannot be left out of the discussion. In this last case it might be used to suggest the payment of slightly more for a contract to haul above said pupils since the total daily cost per pupil would be

less than 20 cents, which is less than the maximum shown in the preceding table."

Conclusions and Recommendations

In seeking to clear up difficulties the committee

suggests:
(1) Each board should review intelligently the transportation experiences of the past, see the growing demands for transportation for the coming year, know its ability to raise funds for school purposes, and then decide how large an amount

shall be placed on the budget for transportation.

(2) It should decide whether it will move the (2) It should decide whether it will move the boundary lines, beyond which transportation is to be allowed, so far away from the schools that all the transportation expenses of hauling all the pupils beyond these boundaries shall be paid by the school board or whether these lines shall be drawn nearer to the schools, or otherwise, and the patrons of pupils living beyond these lines, be asked to bear part of their expenses. If the latter plan is chosen, then the terms upon which these cooperative payments are to be made should be well defined. How much shall the board pay? How much shall the patrons pay? Upon what plan shall this be done?

(3) The board should, directly, or perhaps better through the aid or assistance of its employees, map out the various bus routes of the district and designate the official stops thereon, to-

trict and designate the official stops thereon, to-gether with the speedometer distance of each stop from the schools, the number of pupils to be transported from each stop, and the class of roads over which the pupils are to be transported. There are important facts both in the calculation of cost

and in the proper operation of school busses.

(4) It should decide what to do for those pupils who are so scattered that it is not practical to establish school bus routes for them, but who can provide private, or club rigs if reimbursed for so doing for those who live so far away from school that it would take them too long to travel back and forth each day, but who, if allowed the maximum paid to those transported on the longest routes, would move in and live near the school and apply this allowance on their board and lodgings: also for those who move into the remote parts of

the district from other districts or states during the district from other districts or states during the school year; and at the same time, it should check against those who may move about solely for the privilege of participating in transportation allowances. The board must be fair to every one, and under similar circumstances do as much for one as for another. This would not prevent the payment of different amounts at different distances, should the hoard down it just and desirable

the payment of different amounts at different distances, should the board deem it just and desirable to do so. Some districts will permit this, but most generally such a zoning system with different allowances is almost impossible.

(5) Whatever the plan, suitable contracts should be carefully drawn up, embodying in a clear and concise manner the terms for drivers, conveyances, pupils, patrons, and officers of the board as the case may be. It is desirable to place the drivers under bonds. It may not be desirable to accept the bid of the lowest bidder for driver, as accept the bid of the lowest bidder for driver, as such lowest bidder may be both incompetent and unreliable.

The board should keep all the ways and means of transportation under its control, and should not enter into contracts for a period of time during which, if they are made up contrary to this principal and violated, would react against the welfare of the pupils. Also allowances to pri-vate individuals should be withdrawn if the regu-

(7) It should reserve the right to change transportation conditions as necessary and to provide for improved conditions at any time where such may be possible.

It should call for bids on contracts at a certain time and give the general public ample notice of the same. These contracts and arrangements should be made up in plenty of time for the opening of the school year.

The board should reserve the right to cancel any contract upon short notice if such contract is not being faithfully kept.

(10) The salient conditions and allowances for transportation should be given publicity, to the extent that each patron may know that the board is trying to deal with everyone fairly. The conditions agreed upon and announced should be adhered to strictly.

(Concluded on Page 104)



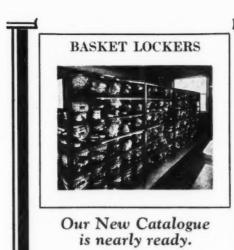
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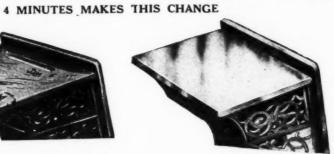
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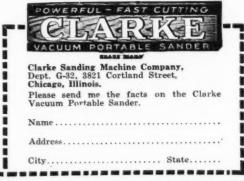
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(Concluded from Page 102)

The principal of each school, in accordance with the rules and regulations of the board, should be required to have a knowledge of all matters pertaining to the transportation of any of his pupils, as well as of all contracts and claims involved in their transportation service that is being rendered and should report promptly to the superintendent any violation of contracts.

(12) These matters of transportation are of great enough importance to require the combined judgment of the school board as a whole. Each board member will avoid many unpleasant petty difficulties if he will urge that all matters of transportation be taken up in regular session rather than by special committees or through individual members. At such meeting each board member should be willing to give all the information he can procure bearing upon any particular transportation route or upon all of them. The deliberations and decisions of the board as a whole should be regarded as final, and the officers and employees of the board should proceed accordingly, and in good faith, to see that they are upheld and sus-



### DR. WILSON COMPLETES SIXTEEN YEARS' SERVICE ON LAMAR SCHOOL BOARD

Dr. C. S. Wilson, a member of the school board of Lamar, Colorado, for the last sixteen years, and president for the last four years, recently relinquished his board membership for the reason that he will establish his residence in California.

Dr. Wilson, who had served on the board longer than any other man in the history of the Lamar schools, had entered upon his third six-year term which would have been completed in 1931. During his long period of service on the board, Dr. Wilson

served as board member, secretary, treasurer, and president, and in this time he had missed only two meetings in the entire sixteen years that he served. During his service, Dr. Wilson was active in the work connected with the erection of the high school and the school gymnasium. During this time the high-school attendance was trebled, and the num-

ber of teachers was increased from 34 to 47.

Dr. Wilson's long and varied experience and his careful, unselfish judgment in connection with school-board affairs made him a great value as a member of the Lamar school board.

### NEWS OF SCHOOL OFFICIALS

—Mr. Charles Riebsamen, of Titonka, in Kossuth county, Iowa, has completed 51 years as a member of the local school board, and claims a longer service than any other school-board member.
Mr. Riebsamen became a member of the board

in March, 1876, and served continuously until March, 1927, a term of 51 years. During all of that time, with the exception of two years, he was president of the board. When Mr. Riebsamen took office, U. S. Grant was president and the bitter fight between Tilden and Hayes for president was just beginning.
Mr. Riebsamen has seen the school system grow

Mr. Riebsamen has seen the school system grow from three small schoolhouses to the present fine consolidated school. Twenty years after he became president, the present town of Titonka was built in the township, and later a consolidated school was built there and he became president of the new school. Two of the original schools were lost by fire and one was destroyed by a cyclone which visited the section in 1894. ch visited the section in 1894.

-Mr. C. H. Denslow is a new member of the

school board at Stuttgart, Ark., succeeding Mr. C. R. Ham.

C. R. Ham.

—Mr. A. H. Hoff has been elected a member of the school board at Decatur, Ga., to succeed the late Mr. W. A. Bibb.

—Mr. L. L. Newhart has been elected purchasing agent of the school board of Hanover township, near Wilkes Barre, Pa.

agent of the school board of Hanover township, near Wilkes-Barre, Pa.

—Mr. William H. Hill, of Blackwell's Mills, N. J., has resigned as a member of the board of education of Hillsborough township, after a service of twenty years as a member, and almost as many years as presiding officer. Mr. J. V. D. Bergen has been appointed to succeed Mr. Hill as president.

 —Mr. George Brown has been appointed president of the school board at Wilkes-Barre, Pa., to succeed Mr. Louis Frank.
 —Mr. James F. McManus, chief attendance officer of the attendance bureau of the New York City department of education, has been nominated for the position of assistant director of attendance. for the position of assistant director of attendance.

Mr. McManus succeeds Mr. George H. Chatfield, who was recently elected director of attendance.

—Mr. Arthur Cushing has relinquished his membership on the school board of North Providence, R. I., in order to accept the office of state senator.

Mr. Chester F. Lees and Mrs. Yvonne Hecarte are new members appointed to fill the vacancies on the board.

—Dr. Elbert W. Griffith, superintendent of schools of Glens Falls, N. Y., died recently from injuries received in an automobile accident.

—Mr. Atanasio Montoya, of Albuquerque, has been elected state superintendent of education in New Mexico.

—Dr. Allen E. Miller, of the editorial division of the U. S. Bureau of Education, has retired from active service, having reached the age of 70 years. Dr. Miller has been with the Bureau for 41 years. —Supt. Charles A. Walker of Chelmsford, Mass., has been elected as head of the schools of May-

—Mr. O. B. Thorgrimson succeeds the late E. Shorrock as president of the school board of Seattle, Wash. Mr. Thorgrimson, who was vice-president of the board, will serve until March, when he becomes eligible for election.

—Mr. Harry Goodman, a member of the school board of New Orleans, La., died at his home in that city on December 12 after a short illness. Mr. Goodman had been appointed a member of the board to succeed Mr. James J. Fortier and at the last school-board election was reelected ahead of all other candidates.

-Dr. A. J. Anthony has been reelected as president of the school board at DuBois, Pa., and Mr. Walter Ross as vice-president.

-Mr. W. Grant has been reelected as president of the school board of Nanty-Glo, Pa., and Mr. William Walsh as vice-president.

—Mr. P. J. McGinty has been reelected as president and Frank Messett as vice-president of the board at Olyphant, Pa.



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### PERSONAL NEWS OF SUPERINTENDENTS

—Mr. I. I. Cammack, superintendent-emeritus of the schools of Kansas City, Mo., has announced his resignation in a communication to the school board. Mr. and Mrs. Cammack have announced their intention to live near their daughter at Santa Monica, Calif. Mr. Cammack had been with the school system since 1886 and had completed forty years of service in Kansas City.

—Supt. T. E. Hook of Troy, Ohio, recently refused an offer to become head of the school system at Chillicothe. The board offered Mr. Hook a substantial increase in salary as an inducement to remain with the Troy schools.

remain with the Troy schools.

—Mr. Edgar N. Haskins, superintendent of schools at Vincennes, Ind., has announced his resignation effective January 31, provided the board obtains a successor. Mr. Haskins agreed to remain in the office until a new superintendent was employed.

—Mr. Harry Kirk, formerly superintendent of schools in Orange county, Ind., has been appointed as relief fund auditor of the state school system. Mr. Kirk succeeds Mr. H. E. Cushman, who resigned to become field examiner for the state board of accounts.

—Mr. B. R. Inman, formerly of Danville, Ind., has been appointed chief of the educational department in the office of the state fire marshal. Mr. Inman's duties include the inspection of schools, the supervision of fire drills, and the giving of addresses on practical fire prevention measures.

—Mr. W. F. Kennedy, director of platoon schools and principal of the McKelvy School, Pittsburgh, Pa., has been promoted to the position of associate superintendent of schools, at a salary of \$7.500.

—Mr. Ben G. Graham, first associate superintendent of the Pittsburgh schools, has been given charge of the secondary department of the school system. Mr. Graham has been relieved of the elementary work.

—Mr. Paul Y. Eckart has been appointed supervising principal of the school system at Palmyra, Pa. Mr. Eckart succeeds A. S. Griffith.

—Mr. F. H. Fritz of Ashley, Pa., has been elected president of the superintendents' section of the Educational Conference, which held its recent meeting at Bucknell University.

—Dr. LeRoy A. King, professor of educational administration in the University of Pennsylvania, has been appointed by the governor a member of the State Council of Education. Professor King's experience in educational administration, as a member of the faculty of the school of education of the University, and his special service in the problems of educational finance in the state, will no doubt prove a valuable contribution to the deliberations of the Council

of the Council.

—Mr. H. B. McCall is a candidate to succeed himself as superintendent of schools of Blount county, Tenn.

county, Tenn.

—Mr. A. H. Horton of Coushatta, La., has been reelected superintendent of schools of the Red River parish. Mr. Horton had completed sixteen years of service as head of the school system.

—Mr. Henry Lynn Moore, a former Minneapolis, Minn., educator, died at his home in that city on December 14, at the age of 74. Mr. Moore was for four years assistant superintendent of the Minneapolis schools.

—Mr. A. C. Butler, a former superintendent of schools at Abingdon, Ill., died at his home on December 12, after an illness of several weeks. Mr. Butler was one of the best known educators in Illinois and had spent his entire lifetime in public school work.

—The school board of Fairfield, Conn., has increased the salary of the assistant superintendent of schools from \$2,800 to \$3,000 per annum.

—Mr. C. W. Price of Evart, Mich., has been appointed to undertake special service in high-school supervision for the state education department. Mr. Price will make his headquarters at Lansing.

—Mr. M. A. Cassidy, for forty years superintendent of schools at Lexington, Ky., died at his home in that city on December 22, at the age of 72. Mr. Cassidy had been in poor health for two years, but had continued in his office and had visited the schools daily until a few weeks previous to his death.

Mr. R. W. Howey, 87, the first superintendent of public instruction in Montana, died at Harlem Springs, Ohio, in November. Mr. Howey served two terms as state superintendent, and during his period of service, introduced many improvements into the school system.
 Mr. L. Beahm has been elected superintend-

-Mr. L. L. Beahm has been elected superintendent of schools at Canon City, Colo., to succeed O. B. Drake.

—Following a court trial, Mrs. Lucy Nash Bachman, superintendent of schools of Gila county, Ariz., has been found not guilty of the charge of embezzlement. The charge against Mrs. Bachman was based upon a county warrant drawn in her name, for \$505.80, which it was claimed, was cashed and converted to her own use. Mrs. Bachman demonstrated that the money had been paid out for stage hire, for repair of school furniture, and for supplies for the schools.

-Mr. J. P. Eskridge of Florence, Ala., has been elected president of the southern division of the Colorado Education Association, succeeding H. H.

Van Fleet.

—Mr. S. B. Butler, superintendent of schools of Madison county, Ala., has announced his candidacy for the office of state superintendent of education in 1930.

—Mr. D. M. Hibner, superintendent of schools of Ray-Sonora, Ariz., has been elected president of the Arizona Educational Association.

—Supt. John Dietrich of Helena, Mont., has been reelected head of the school system for his eighteenth year. During Mr. Dietrich's long period of service, three new school buildings and two bungalows have been erected, and attendance in the high school has grown from 300 to 600 students.

—Mr. Paul Knox was recently appointed superintendent of schools of North Augusta, Ga., succeeding the late Major T. J. Lyon. Mr. Knox has completed three years of service in the schools and is at present taking a postgraduate course in administrative work.

-Mr. L. B. Tedford of Idaho Springs, Colo., has been elected superintendent of schools at Hay Springs, Nebr.

-Mr. S. J. Martin has announced his resignation as superintendent of schools at Litchfield, Mich.,

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to take effect at the close of the school term.

—Mr. M. W. Longman, superintendent of schools at Muskegon, Mich., has announced his resignationat the close of his contract in July.

—Mr. W. A. Larson of Valley City, N. Dak., has accepted the superintendency at Fort Yates.

—Mr. A. B. Davis, of Mount Vernon, N. Y., has retired as principal of the high school after a service of 35 years. In honor of the work which Mr. Davis did as principal of the school, the board has recommended that the next high school be named the A. B. Davis High School.

—Mr. Harvey H. Davis, formerly director of the

named the A. B. Davis High School.

—Mr. Harvey H. Davis, formerly director of the division of records and statistics of the St. Louis, Mo., board of education, has become assistant professor in the school administration department of the Ohio University.

—Mr. A. F. Stauffer has been appointed assistant superintendent of schools at Jersey City, N. J.

—Mr. W. L. Miller of Willard, Ohio, has been elected superintendent of schools at Chillicothe, to succeed Mr. G. A. Bowman. Mr. Miller's appointment is for a three-year term and begins immediately.

mediately.
—Mr. H. F. Bagemihl of Fox Lake, Wis., has been elected superintendent of schools at Darlington.

—Mr. W. J. Shirley has been elected superintendent of schools at Havre, Mont. Mr. Shirley succeeds Miss Elizabeth Ireland, who became state

succeeds Miss Elizabeth Ireland, who became state superintendent of schools on January 7.

—Mr. R. M. Peet, formerly superintendent of schools at Floodwood, Minn., has accepted a position with the Scott, Foresman Company of New York. Mr. L. E. Harris has been appointed as superintendent for the remainder of the year.

—Mr. William H. Hanlon, superintendent of schools of Contra Costs county, Calif., has been elected president of the bay section of the California Teachers' Association for the next year.

—Mr. S. J. Martin, superintendent of the Litchfield high school at Litchfield, Mich., has accepted a similar position at Evart. Mr. Gerald Bradley of Waldron, has succeeded Mr. Martin at Litchfield.

—Mr. W. E. Myers has been elected superintendent of schools at Roslyn Wash., to succeed L. E. Forbes. Mr. Myers was formerly superintendent of schools in Kittitas county.

—Mr. Andrew E. Schultz of Lima, Ohio, has been elected superintendent of schools at Cridersville.

—Supt. Frank Hendry of Royal Oak, Mich., has been reelected for a term of three years, beginning

with July 1, 1929. The reelection carries with it a

salary of \$7,000 for the first year, \$7,250 the second year, and \$7,500 the third year.

—Supt. W. E. Phipps of North Little Rock, Ark., will teach the technique of teaching at the state

—Supt. W. E. Phipps of North Little Rock, Ark., will teach the technique of teaching at the state university during the coming summer.

—Miss Katharine Hamilton, assistant superintendent of schools at St. Paul, Minn., has been given a five months' leave of absence, which she will devote to travel and study in European and Mediterranean places. Miss Hamilton will return to the United States on May 18.

—Mr. George Morris, superintendent of schools of Bloomfield, N. J., died recently after a week's illness. Mr. Morris was graduated from Rutgers College in 1889 and received his master of arts degree from Columbia University. He was appointed superintendent of schools in 1904 and remained in that position until his death.

—Dr. J. Russell Smith, of Columbia University, on Christmas day, received the Harmon Award for his recent paper on "Plan or Perish," published in the Survey Graphic in July, 1927.

The Harmon Foundation each year makes an award to the author of an article of signal benefit in stimulating constructive opinion in social or industrial fields. The award consists of a gold medal and \$500 in cash.

—Mr. E. S. Russell, formerly superintendent of schools at Simsbury. Conn. has become director of

—Mr. E. S. Russell, formerly superintendent of schools at Simsbury, Conn., has become director of the teacher-training school at New Haven, Conn. Mr. Paul D. Collier, of Port Arthur, Tex., has succeeded Mr. Russell as superintendent.

—Mr. W. W. Rupert, former superintendent of schools at Pottsville, Pa., for thirty-seven years, died on January 6 at the age of 78.

-Supt. G. H. Sanberg of Rochester, Minn., has been reelected for a fifth consecutive term, and his salary increased to \$5,700.

—Supt. G. L. Jenner of Bay City, Mich., has been reelected for another term of two years.

-Mr. J. C. Pyle, 60, superintendent of schools at Sherman, Tex., died recently, following a stroke of apoplexy.

of apoplexy.

—Mr. W. H. Martin, 52, superintendent of schools at Wilkinsburg, Pa., died at his home in that city. Mr. Martin was a graduate of Franklin College and had lived in Wilkinsburg for the last twenty years.

—Mr. W. L. Miller, superintendent of schools at Willard, Ohio, has been elected as head of the school system at Chillicothe, to succeed G. A. Bowman.

-Mr. R. L. Negroo has resigned from the super-intendency of the elementary schools at Neponset,

### NEWS OF SCHOOL OFFICIALS

—Mrs. Clara T. Guild, a member of the school board of Medford, Mass., has resigned after a service of thirty years on the board. Mrs. Guild was elected to the board in February, 1898, to fill

was elected to the board in February, 1898, to fill a vacancy due to the death of her husband.

—Mr. F. A. Campbell, for nine years a member of the school board of Oakland, Calif., died at his home on December 13, after a long illness.

—Maj. Frank Baird, 86, for many years a member of the school board of Canton, Ohio, died at his home on December 28, after a brief illness of an enumonia. Mr. Raird was elected a member of the pneumonia. Mr. Baird was elected a member of the board in 1899 and served on the board until 1905.

He served for five years as president of the board.

—Mr. Walter E. O'Leary, division supervisor of the bureau of attendance of New York City, has been appointed as chief attendance officer, to succeed Mr. J. J. McManus. Mr. O'Leary has been connected with the attendance bureau since 1912 and

nected with the attendance bureau since 1912 and had occupied his former position since May, 1924.

—Dr. John M. Kaiser, 65, a former member of the school board at Aurora, Ill., died at his home after a lingering illness. Dr. Kaiser was a member of the board for several years.

—Mr. George A. Pickering, 58, formerly a member of the school board of Kansas City, Mo., died suddenly on December 20.

of the school board of Kansas City, Mo., died suddenly on December 20.

—Mr. G. F. Wasson has been reelected a member of the school board of Salt Lake City, Utah.

—San Francisco, Calif. Mr. William F. Benedict is the new member of the board of education, succeeding Mr. Fred Dohrman, Jr., who has resigned. Mr. Benedict was appointed for a term of seven years.

—Mr. Edward Fehn, has been elected president of the board of finance of the school board at Evansville, Ind. Mrs. Irene J. Erlbacher, secretary of the board, has been chosen as secretary of the board.

—At the annual meeting of the school board of Narberth, Pa., Col. I. A. Miller was reelected as president of the board, and Mrs. F. T. Van Auken as vice-president. Col. Miller, who was reelected for a third term as president of the board, was appointed to the board three years ago, to succeed Mr. R. J. Dothard. At that time he was elected president, succeeding the late Mr. C. H. McCarter.

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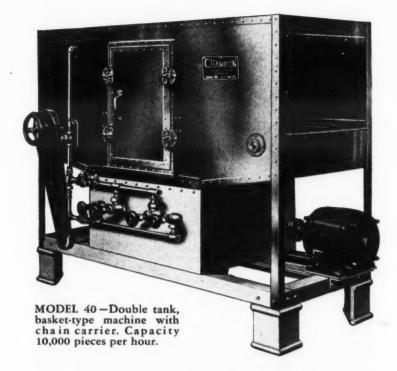
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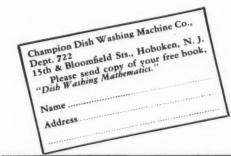
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### ADOPT RULES FOR JANITORS AND ENGINEERS

## The Rockford Board of Education Adopts Pro-gressive Plan for the Care of School Buildings

The board of education of Rockford, Ill., at its meeting in June, adopted a complete set of rules and regulations governing the janitors and engineers and outlining the details for the care of school property. The basic study for the new rules was made by the superintendent's office and the material was presented to the board of education by Supt. F. A. Jensen. The rules, which became effective July 1, are as follows:

I. Responsibility

1. The janitor in an elementary school will be responsible for the heating, ventilating, and mechanical operation of the building, also the entire janitorial work, and must at all times protect the school property under his charge.

2. The engineer of the high school and the junior high schools will be responsible for the heating, ventilating, and mechanical operation of the building and will have charge of all persons rendering service on the engineering staff.

3. The chief janitor of the high school and the junior high school will be responsible for the entire janitorial work of the building, and will have charge of all persons rendering service on the janitorial

of all persons rendering service on the janitorial staff.

4. The principal of each school is deemed the executive head and must see that these rules are carried out.

II. Hours of Duty

1. Engineers and janitors are to be at the school buildings between the hours of 7:00 a.m. and 5:00 p.m. and at night until the close of night school or other activities when night sessions are held, which extra compensation is paid, and such

other hours as are necessary to carry on properly the work under his charge.

the work under his charge.

2. Engineers, janitors and mechanics may quit work at 12:00 m. on Saturdays, except as set forth in Rules III, IV, V, XII, and XIV.

3. In case any engineer or janitor is incapacitated for duty by sickness or otherwise, notice must be sent immediately to the superintendent of buildings and grounds, so that a substitute may be supplied, it being understood that all efforts possible shall be made to reach the above official at his office, residence, or elsewhere.

III. Sweeping

III. Sweeping
1. All rooms, halls, entries, passages, stairways, and closets, used for school purposes, must be thoroughly swept each school day, using sweeping com-pound wherever practical, or where vacuum cleaners are not provided. Shavings, sawdust and rubbish must be removed from the manual-training rooms

2. Janitors are permitted to sweep halls and stairways after the afternoon recess, and rooms after 3:30 p.m. or as soon thereafter as he may be ready to commence work.

3. When sweeping the halls, enough sweeping compound must be used so that no dust will be received.

IV. Dusting

1. Dust all furniture, window sills, wainscoting, woodwork, handrails, etc., each school day after sweeping, or the next day before 8:00 a.m. Dust the side walls and ceilings at vacation time or more often if necessary.

V. Mopping

1. Halls, stairways, entries, and domestic-science rooms, unless they have been treated with oil, shall be mopped each week. Kindergarten floors should never be oiled and must be mopped each week. All other rooms occupied for school purposes week. All other rooms occupied for school purposes shall be mopped at vacation time or oftener if ordered by the principal.

2. No water is to be flowed over or put on the floors from a hose (cement basement excepted).

3. Wash all desks and tables during vacation

time or oftener if necessary.

VI. Window Cleaning 1. Clean all windows at least every three months during the school year (except outside in freezing

VII. Toilets
1. Clean thoroughly, all water closets and

fixtures each school day (this includes the mopping of the floors), and keep at all times a sufficient supply of toilet paper in the toilet rooms.

VIII. Storeroom, Boilers, and Fan Rooms

VIII. Storeroom, Boilers, and Fan Rooms
1. Keep all storerooms, boiler, and fan rooms
neat and clean. Whitewash the walls and paint
boiler fronts and pipes in boiler and fan rooms
whenever directed by the superintendent of buildings and grounds. ings and grounds.

2. Never allow

2. Never allow an accumulation of rubbish; have same removed at once.

have same removed at once.

IX. Sidewalks and Yards

1. Keep sidewalks clean and in good order.

2. Keep lawns in good condition, the same to be cut and raked as often as may be necessary, and kept free from waste paper and rubbish.

3. Keep all shrubbery trimmed; also cultivate all plants and shrubbery when necessary.

X. Sweepings and Rubbish

1. Collect and burn all sweepings, rubbish, and refuse.

refuse.

2. The use of wooden boxes in rooms for the graps of lunch, etc., collection of waste paper and scraps of lunch, etc., is prohibited.

XI. Water and Electricity

1. Turn off water-supply main, also main electric switch before leaving the building at night.

2. See that the electric lights are not used, except when and where necessary.

3. Careful attention to the above instructions will be demanded.

will be demanded.

will be demanded.

XII. Snow

1. All walks around the premises and in yards must at all times be kept cleared of snow and ice. If impossible to remove ice, sprinkle walk with sand or salt and remove ice as soon as possible thereafter. A sufficient supply of sand should be kept on hand at all times for the above purpose.

XIII. Ventilating of Classrooms

1. Ventilate thoroughly every classroom at the close of each school day, by opening windows and doors, except in case of storms. This rule applies only to buildings not provided with a plenum system of heating and ventilating.

tem of heating and ventilating.

2. The fresh-air intake rooms and fresh-air shafts must be kept neat and clean at all times,

and not used as storage rooms.

3. The doors connecting same with basement must be kept closed while school is in session.

4. Windows and doors of all classrooms must be

kept closed as much as possible when the fans are (Continued on Page 112)



Improved PeerVent Unit with front removed to show interior. All parts can easily be removed and replaced, for inspection or cleaning, without tools. The air filter (extra equipment) can be of any make specified.

# Latest Improvements in Unit Heating and Ventilating

backed by 38 years of specialized experience

Many important new features have been developed for PeerVent Heating and Ventilating Units during the past several months. In fact, all of the important features—radiator, motor, fans, and controls—have been improved. These improvements, made by the pioneer manufacturers of Heating and Ventilating Units, should have your careful consideration.

Adjustable motors are now standard equip-

ment on PeerVent Units. Each Unit can be equipped to deliver the exact C.F.M. capacity required. If the C.F.M. requirements change at any time, the capacity of the Unit can be changed accordingly.

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HEATING AND VENTILATING UNITS

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### CRANE MATERIALS REDUCE REPAIR AND MAINTENANCE EXPENSE THROUGH QUALITY THAT COSTS NO MORE

(Continued from Page 110) in operation, so that classrooms may be properly supplied with fresh air.

in operation, so that classrooms may be properly supplied with fresh air.

XIV. Temperature to be Maintained During Heating Season

1. Have the temperature of every classroom occupied for such purposes at a temperature of 70 deg. F. at 8:30 a.m. on each school day, and maintain the temperature between 68 and 70 deg. throughout the day until school is dismissed. Heating plants must be started as early as necessary to insure these conditions.

2. Any failure of a thermostat heat regulation must be immediately reported to the office of the superintendent of buildings and grounds.

3. During cold weather, the temperature in school buildings must never be allowed to go below 40 deg. (Sundays and holidays included).

4. Engineers and janitors must report at once at the office of the buildings and grounds superintendent, any defect or trouble in the heating plants or apparatus that prevents or hinders the satisfactory and efficient operation of same.

XV. Ventilating Apparatus

1. Have ventilating apparatus in full and complete operation not later than 8:30 a.m. on each school day and run same to its full capacity until the close of school sessions, unless otherwise directed by the principal.

2. While the heating and ventilating plant is

the close of school sessions, unless otherwise directed by the principal.

2. While the heating and ventilating plant is in operation, the engineer must devote his entire time to same and to visiting classrooms to see if thermostats are working properly and the right degree of temperature is being maintained. When the heating fan is running, the air washer must be in operation, except on rainy days.

3. Great care must be observed in holding the proper temperature in the plenum chambers, vary-

proper temperature in the plenum chambers, varying with the seasons.

xVI. Precaution Against Fire

1. Take extraordinary precaution against fire. See that all stairways and their approaches are kept clear and clean at all times.

2. Become familiar with the use and location of all the fire extinguishers in the school building and when a fire extinguisher is used it must be reported to the office of the superintendent of buildings and grounds and must be refilled at once.

3. See that oiled rags, cloths or waste used about the premises are kept in buckets provided for that purpose only, the lid of which must be kept closed,

4. Engineers and janitors should see that all

metal-covered or fire doors in the basements are kept closed, except when persons are passing

5. Smoking by any employee in the school building is prohibited.
6. In buildings heated by hot-air furnaces and where floor registers are used, register boxes must be cleaned at least once every two weeks and more

be cleaned at least once every two weeks and more often if necessary.

7. Where the slide fire escape is used on buildings, the janitor or someone delegated for this purpose, should slide down the escape each school day, using a gunny sack or coarse cloth to keep the escape as clean as possible.

XVII. Exits and Inspections

1. See that all exit doors are unfastened on all school days, between the hours of 8:00 a.m. and 4:00 p.m.

4:00 p.m.

2. Visit all parts of the building before closing

2. Visit all parts of the building before closing for the day.

3. Janitors must report to the principal each day at 8:30 a.m. the condition of all exits.

XVIII. Flags

1. Display the national colors upon or near the school building each school day from 8:00 a.m. (except during stormy weather), and lower same at the close of the afternoon session. Also raise and lower the national colors at such times as the principal may direct.

2. No flag other than the United States national colors shall be displayed at any time.
3. On Memorial Day, May 30, the flag should be kept at half-mast.

XIX. Clocks

1. Wind all clocks throughout the building regularly, and report to the principal if any are out of order.

XX. Pupils' Desks

1. Report to the principal all cases of cutting or marring of pupils' desks, breaking of inkwells, writing on walls, damaging the fixtures in the toilet rooms, or other such acts, on the part of the pupils.

XXI. Repairs

1. Make all minor repairs to the heating apparatus and the building in general, as far as pos-

2. See that the building equipment and premises in general are not destroyed or defaced by hammering nails or tacks into them. Thumb tacks may be used on upper rail of blackboard for displaying work done by the pupils.

XXII. Inventory

Engineers and janitors, if requested, shall assist the principal in taking such inventories as are required at the end of each school year.

XXIII. Supplies

1. Employees rendering service under the direction of this department will at all times assist the attachés of the supply department and others in the delivery of supplies to the building, except in the case of the engineer, who, during the hours the heating plant is in operation, must attend strictly to his regular duties.

XXIV. Other Duties
1. Engineers and janitors will perform such other duties about the building as may be assigned

ther duties about the building as may be assigned them by the principal.

2. Engineers and janitors are not responsible for the supervision of the children at recess or at any other time. They will, however, assist the principal and teachers in such supervision when called upon to do so.

3. To render immediate personal assistance in any emergency.

any emergency.

4. Carry out further orders and instructions that may be given by the superintendent.

XXV. Messenger Service

1. No engineer or janitor will be permitted to leave the premises during working hours, except in case of emergency, and then only by permission of the principal.

XXVI. Conduct

1. Cooperate with the principal and teachers at all times, and be courteous to the pupils.

2. Use no intoxicating liquors on or about the school premises.

3. Any person violating this rule in any particular will be subject to immediate dismissal.

ular will be subject to immediate dismissal.

XXVII. Change of Address

1. Notify the office of the superintendent of buildings and grounds and the principal of any change of address or telephone number.

XXVIII. Principal's Reports

1. Principals will address all complaints in detail, about engineers and janitors, to the superintendent of buildings and grounds, in writing. Damage to buildings, equipment, or other property of the board of education, should be immediately reported to the office of the superintendent of buildings and grounds by telephone, and confirmed in writing as soon as possible thereafter.

(Continued on Page 114)

(Continued on Page 114)



it's biting cold, damp and dangerous, a Sturtevant Unit Heater-Ventilator will draw in evenly controlled quantities, filter it clean, warm it to precisely the right temperature and admit it to a room SAFELY...without the hint of a draft . . . without sound . . . without attention!

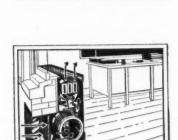
The temperature controlling mechanism is simple and trustworthy . . . it may be entirely automatic or equipped for manual operation if desired.

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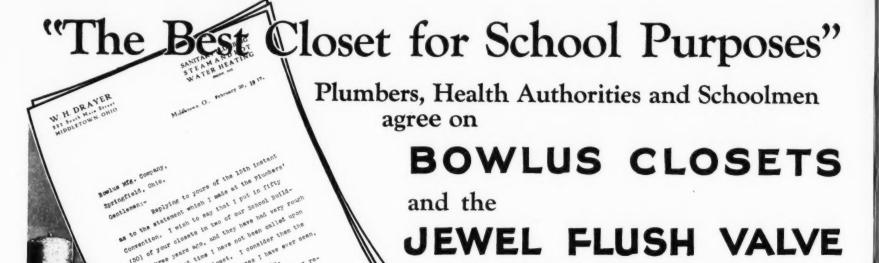
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The Jewel principle of a scouring flush by Air and Water under Pressure bears the highest indorsement of sanitary engineers and health authorities. Its automatic, never-failing action meets the modern demand of schoolmen for equipment which takes all responsibility from forgetful children. Its rugged, simple construction, approved by plumbers, does away with all interior springs, treacherous needle valves and other sources of trouble. The BOWLUS, equipped with the famous Jewel Flush Valve, is "the best closet for school purposes."

> Write NOW for descriptive literature concerning the famous Jewel Flush Valve.

### The BOWLUS MANUFACTURING CO. Springfield · Ohio

(Continued from Page 112)

ose, to soudely them too Hitimy.

Modern sanitary engineering favors the utility room idea in schools. The illustration shows the patented Jewel No. 67 equipped with the automatic Jewel Flush Valve and the vitreous china vent conduit which conducts foul air from the bowl into the utility room from which it is removed by an exhaust fan. All piping is within the utility room and accessible without damage to walls or floors. The ideal installation wherever more than one closet is set in a series.

XXIX. Vacation

1. All engineers and janitors who have completed one year's continuous employment for the board of education shall be granted a two weeks' leave of absence, without loss of salary, the period of leave of absence to be approved by the superintendent of buildings and grounds, and must be taken between July 1 and August 20 each year.

XXX. Illness

1. In case an engineer or janitor is absent on account of personal illness or because of serious illness or death in his immediate family, they shall receive full pay during the first five days' absence on account of either or all of these causes, and half pay thereafter for not more than five days each year.

year.

2. In case of illness or absence on account of illness, notice of such absence must be reported at once to the office of the superintendent of buildings and grounds.

ADMINISTRATION
—Enrollment in Illinois high schools has increased 548 per cent in the last 27 years, while the population of the state has increased 45 per cent, according to a recent pamphlet on schools issued by the state teachers' association. The pamphlet shows that there are 357,638 pupils enrolled in Illinois schools. Of these, 251,255, or about one fifth, are high-school students.

—Upon the suggestion of Supt. A. J. Ratchford of Shenandoah, Pa., the local rotary club has sponsored a movement to place a radio equipment in the high school. The system provides for a main switchboard, with a series of wires connected to each classroom, the auditorium, and the gymnasium. A microphone attachment will be placed in the office of the superintendent and the high-school principal.

Under the plan, teachers will be furnished with copies of educational programs and during certain hours of the day they may, by pressing a button, tune in on certain subjects appropriate to the class-

—Burlington. Vt. The city council has been asked to approve a change in the city charter to the effect that the superintendent's term of service shall begin and end on July 1 of each year. Under the present charter, the superintendent is appointed for one year, beginning on the first Eriday in for one year, beginning on the first Friday in April. In view of the fact that the school term

closes July 1 in accordance with the state law, the commissioners feel that the superintendent's term should also close on that date.

term should also close on that date.

—Lowell, Mass. The attempt of the local school committee to force the city government to approve an appropriation of \$43,655 to complete the work of the schools for the year 1928 ended in failure when the state supreme court dismissed the committee's request for a mandamus. At the beginning of the year, the school committee had asked for an appropriation of \$1,461,533, but the city government reduced the estimate to \$1,438,725. The school board protested the action, and when it applied for the difference between its request and applied for the difference between its request and the amount appropriated, the mayor and city coun-

cil refused the request.

The decision is of some interest since there ap peared to be some question recently as to whether or not the common council and board of aldermen could legally reduce the appropriations of the school department.

-Coeur d'Alene, Odaho. The school board has granted the public use of the school gymnasium two evenings per week under proper supervision.

—Aurora, Ill. The east side board of education has revised its committee arrangement, to consist

of three instead of nine standing committees. The new committees will be those on buildings and grounds, teachers and salaries, and finance.

Under the new plan, the buildings and grounds

Under the new plan, the buildings and grounds committee will have charge of much of the work formerly carried on by three minor committees.

—The headquarters of the board of education of Cleveland, Ohio, will be moved April 1 to the Locomotive Engineers Bank Building. The board has leased the building for two years at a rental of \$183,990. The board will house 44,834 square feet on the third, fourth, fifth, sixth, and twentieth floors, at a cost of \$82,495 a year.

—Helena Mont To expedite school business.

-Helena, Mont. To expedite school business, the school board has ordered that all members attend meetings, unless prevented by illness or absence from the city.

-Danbury, Conn. The school board has granted the free use of the auditorium for educational and community purposes. Organizations desiring the room for meetings must pay for lights, janitor service, and police service.

-Pasadena, Calif. Extending its war on fraternities in the high schools, the board has recently

suspended 40 students because of membership in these fraternities in violation of the state law. This brings the total to 57 with several hundred more in prospect before the fight has been completed. Supt. J. B. Sexson has issued a threat that the schools will be closed if necessary in order to eliminate illegal fraternities.

—The school board of Saugus, Mass., has presented a petition to the state legislature for a special bill to increase the size of the school board from 5 to 9 members. It is planned to make the law effective at the annual town meeting and election in March.

election in March.

—The Arizona senate has amended the state education law providing for a uniform system of textbooks for all high schools in the state. The present law extends the privileges of uniform text-

books from common schools to high schools.

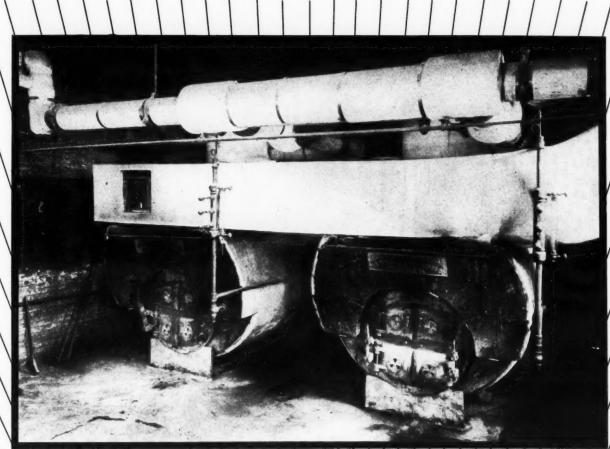
—Legislation giving county school boards, instead of county-court boards, the right to select school superintendents in Tennessee was favored at the recent meeting of the East Tennessee county school superintendents. Under the present system, school superintendents are elected by the county courts.

-The removal of all educational matters from the newly formed county boards of education in Illinois has been proposed by the Illinois teachers' association. Under the plan proposed, the county board of education would have all of the powers of the supervisors in educational affairs. In addition, it would have the executive power of the board of supervisors and would levy school taxes. The board would be composed of five members, elected from the county at large, but not more than one from each district. The members of the board would receive remuneration for traveling

than one from each district. The members of the board would receive remuneration for traveling expenses while in attendance at board meetings. Under the plan, the board of supervisors would be entirely free of its present duties in connection with the schools and from the expense of maintaining the system. ing the system.

—A marking system in use in the schools of Tyrone, Pa., has proved successful in showing clearly and definitely the marks used. In order that teachers may know the standards for makeup work work, for examinations, tests, and promotion, mimeographed sheets are supplied giving all the necessary data. The system tends to insure a measure of uniformity in giving marks.

(Concluded on Page 117)

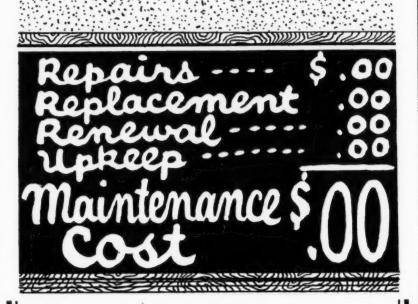


¶ A Public School Superintendent in Jersey City recommended that these Titusville Boilers be installed in Public School Number 9, replacing two other boilers, after he observed the highly efficient operation of Titusville Scotch Boilers in another school.

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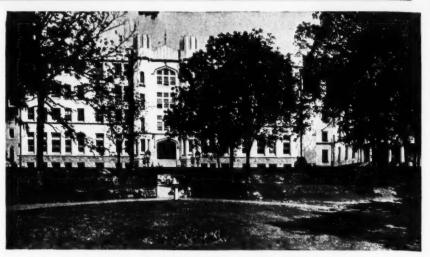
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Any desired shade is obtained by simply mixing ordinary colors in oil with Barreled Sunlight white, or by using the handy tubes of Barreled Sunlight Tinting Colors, now available in two sizes.

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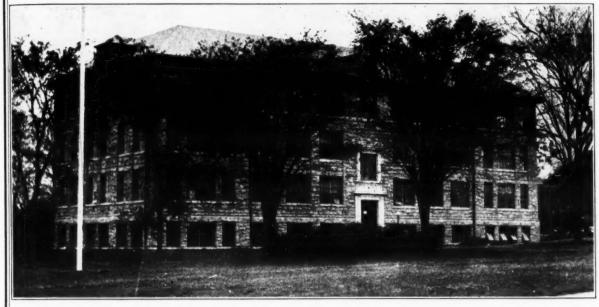
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City..... State.....

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E ACH winter, during extremely cold weather, one reads in the newspapers of classes dismissed from school buildings which cannot be adequately heated. An ample supply of heat even in the most severe weather is always available when a school building is heated with a Dunham Differential Vacuum Heating System. Due to the fundamental design of this system positive circulation to the most distant radiator is assured, the steam being drawn through the supply piping and into the radiators by the powerful vacuum maintained by the Dunham Dif-

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(Concluded from Page 114)

—Supt. John O. Chewning of Evansville, Ind., in a recent report to the board of education, calls attention to some of the noteworthy activities in connection with the administration of the schools during the past year. The superintendent refers to the new rulings of the board made last spring which remove all discriminations in salary sched-ules of teachers and other employees based on sex, race, and martial status. Merit alone determines the pay of all public-school employees, which has had a beneficial effect on the morale of the school

Attention was also called to the fact that the year 1929 will be the last year of the five-year school-building program which will witness the completion of the auditorium-gymnasium at the Hall, Delaware, and Centennial schools, and the building of a stage at the Wheeler. Politics was removed from the schools by placing the appointment and promotion of janitors on a merit basis. The procedure of buying supplies and making other expenditures for the various schools is interesting. At the beginning of the year the respective schools are budgeted, and given a certain amount to spend, the money being placed in the hands of each principal. Whenever a school need arises, the principal lists the articles his school needs. The list is given to the business manager, who in turn presents it to the board of education. Upon the board's approval, the business manager buys the article wanted, and the cost is subtracted from the school's budget.

The cost of running the school system, including

The cost of running the school system, including salaries, supplies, repairs, and maintenance, is about \$1,400,000 yearly. The school tax levy was recently raised to \$1.05 per \$100 of property valuation, which will bring in about \$1,500,000 annually into the school treasury.

-At Massillon, Ohio, the question of a uniform schedule for the dismissal of grade, junior, and senior high schools has come into serious discussenior high schools has come into serious discussion. Owing to the lack of uniformity in dismissal hours, many Massillon mothers are subjected to great inconvenience. Those who have children in the grade, junior high, and senior high schools are required to serve three sets of lunches. The grade school children reach home first at noon, to be followed a little later by the junior high school pupils and 20 minutes after the junior high students is seated, the senior high representative of the family arrives. The problem is to be solved by dismissing all schools at the same hour or introducing cafeterias in the high schools.

—Oklahoma City, Okla. An increase of 1,835 pupils in the last year is indicated in the statis-

tical report recently presented to the school board by Dr. C. L. Cushman, director of research for the city schools. The total attendance in all schools was 27,013, divided as follows: elementary schools, 15,581; junior high schools, 5,347; senior high

—Philadelphia, Pa. More than 40 additional positions in the divisions of the board of education directing the various school activities have been created for the school year 1928-29. In all, 10 supervisors of special types of activities will be

-A special committee of the Illinois teachers' association has recommended a revision of the school administrative procedure, to remove educa-tional matters from county boards of supervisors and place them in the hands of county boards of education.

The committee, which is known as the committee on larger units in school administration, has worked out the details of the new plan. Under the plan, five members would compose the board of education, these to be elected from the county at large, and no two to come from the same district. The members will receive no remuneration, except for traveling and hotel expenses at times of meet-ings. Under the plan, the board of supervisors would be relieved of one of its duties, the care of school affairs and the expense of maintaining the school system.

—Stockton, Calif. A compulsory uniform dress has been adopted for the high-school girls. The uniform dress was adopted by a committee of mothers and is made of Peter Pan suiting, in tailored effect. The dresses while uniform in style and quality, come in five colors—blue, white, green, peach, and rose-pink. The dresses cost from \$4 to \$4.50 and will be worn by all girls except seniors and postgraduates.

—Birmingham, Mich. The school board has installed vitaglass in one room of the Adams School. The installation of the glass is an experiment to determine the health-giving qualities of the glass and the results in improved health. A comparative

study will be made of a group of children in the vitaglass room and another group in a room with nearly the same exposure and no vitaglass.

—The thirty-first annual meeting of the National Commercial Teachers' Federation was held December 27 to 29 in the Hotel Statler, Detroit, Mich. A total of 882 members were enrolled, of whom 546 were in attendance. The general program included addresses by prominent business and professional men.

was decided to hold the 1929 convention in

It was decided to hold the 1929 convention in Milwaukee, during the last week in December. The officers elected for the year are as follows:

President, Mr. J. L. Holtsclaw, Detroit, Mich.; first vice-president, Mr. Paul Moser, Chicago, Ill.; second vice-president, Mrs. J. F. Fish, Northwestern Business College, Chicago, Ill.; secretary, Mr. C. M. Yoder, Whitewater, Wis.; treasurer, Mr. Charles A. Faust, Chicago, Ill.

HIGHEST DANKS IN STIDIES MADE RY

HIGHEST RANKS IN STUDIES MADE BY
ATHLETES
A recent statistical survey made by a student of
the school of commerce of the University of Wisconsin, Madison, under the direction of Prof. P. G. Fox, shows that the best athletes rank high in unirox, shows that the best athletes rank high in university studies. With an average numerical grade ranging from one to four points higher than the average university grade, five outstanding athletes in each major sport at the state university over a period of six years were judged the classroom superiors of their average academic brother, as a result of the findings of the survey.

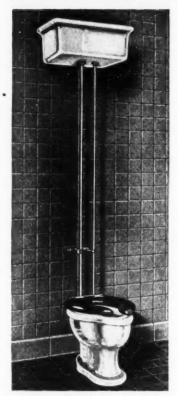
The highest scholastic success among the athletes was achieved by a track man, who maintained an average grade of 90 for three years. The nearest high record to this was that of a baseball captain

who had an average grade of 91 for one year.

Basketball men were found the best scholars during the six years, the 30 star ball-tossers maintaining an average numerical grade of 84. Track men and baseball men tied for second place, with a yearly average grade of 83, while 30 football players during the six-year period achieved an average of 81.

The highest average for any one team, the study indicates, was that of the track team of 1923-24, which maintained an average grade of 87.

In conclusion, the survey reported that the aver-ge of the outstanding group of 120 athletes consistently excelled the average numerical grade of the university as a whole for the six years studied.



Induced syphon closet with vitreous china bowl and open front sanitary golden oak seat with dull rubbed finish.

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### TRAINING TEACHERS IN NORTH CAROLINA

The state education department of North Caro-The state education department of North Carolina has issued a report showing the character and extent of the training of teachers in the state. The report shows that 24,000 teachers are employed in the schools of the state and considerable data is given on the number and per cent of standard and nonstandard teachers during the period

ard and nonstandard teachers during the period from 1919-20 to 1927-28.

During the year 1921-22, 9.9 per cent of the white teachers had gone no further than two years in the high school. In 1927-28, the percentage had been practically wiped out, only .6 of one per cent being left. Practically the same situation was noted in the case of teachers who had only three years of high school. In 1921-22, 36.2 per cent, or more than a third, were graduates of the high school. In 1927-28 the percentage had dropped high school. In 1927-28 the percentage had dropped to 16.1, or approximately one sixth of the total. It is shown that, while only 48.90 per cent of the teachers held standard certificates in 1919-20, 21.999 teachers, or 91.92 per cent of the teaching profession, held standard certificates.

### SCHOOL-BOARD HEAD OPPOSES MARRIED-WOMEN TEACHERS

Mr. Frank J. Petru, president of the school board at Cicero, Ill., has stirred up considerable interest in the married-teacher problem through his recent stand against married-women teachers in the schools.

Speaking recently on the subject before the Illinois State School-Board Association, Mr. Petru made known his position which resulted in a flood of letters from married-women teachers. Mr. Petru pointed out that there are hundreds of school teachers who have spent years of study to educate themselves, but who can get only as far as the

waiting list. He pointed out that there are nundreds of teachers in the Chicago public schools who are married. Again, he said, there are teachers married to doctors, lawyers, and other business or professional men, who merely want an independent income of their own. They want to live in pleasant surroundings and have the luxuries, and therefore persist in keeping out of a job some deserving woman who has need of the work.

Mr. Petru is in favor of giving a widow an opportunity to teach again. However, he insists that

portunity to teach again. However, he insists that a lady teacher who has a provider, should practice the motto: "Live and let live."

### TEACHERS AND ADMINISTRATION

—Reading, Pa. The school board has considered a proposal to lift the post-war ban on married women teachers. There is no shortage of single-women applicants, but some of the members regard experienced women as preferable, whether married

or single.

The school board of Philadelphia, Pa., has been proceed plan for a merit sysasked to approve a proposed plan for a merit system in connection with the compensation of teachers. The plan is based on the Pittsburgh merit

system and provides for special merit groups, with definite salaries attached to each group.

—Cambridge, Mass. The school board has amended its rules, providing that no teacher or member of the supervising staff shall keep a private school, nor teach private pupils on school days until the expiration of one hour after the regular closing hour of the schools. In the case of members of the supervising staff, such teaching may not be done earlier than three o'clock on a school day. Under the rules, no teacher may receive, without

Under the rules, no teacher may receive, without approval, any material compensation for giving instruction to a member of his or her class.

—Davenport, Iowa. The board of education has urged the amendment of the teachers' pension law to permit cities of 50,000 population or more to establish systems for paying annuities to retired teachers. The present law gives this privilege only to cities of 75,000 population or more, and restricts the practice to Des Moines and Sioux City. A change in the law at this time would affect Davenport and Cedar Rapids.

port and Cedar Rapids.

—The teachers' welfare committee of the Utah teachers' association, at the recent meeting of the association, discussed plans for a group insurance plan, with accident and sick benefits. Resolutions

were adopted favoring a teacher-retirement law.

—Restoration of the teacher-tenure law in force in California prior to 1927 has been recommended by the California teachers' association in the final session of the association at San Francisco. The present law enacted by the last legislature makes a teacher's position in a school permanent after two or three years, and makes dismissal by school boards or trustees possible only by trial for cause. A return to the law prior to 1927 would exempt the provision of tenure from applying to schools of less than eight teachers. than eight teachers

—Sacramento, Calif. The conference bureau of the city school department, in its recent report to the school board, recommends a continuance of the twelve months' payment plan of salaries for teachtwelve months payment plan of salaries for teachers. The conference board suggested that one of two plans be adopted for the assurance of the turning back of salaries paid to teachers who leave the department after drawing all or part of the summor colors. mer salary.

The first plan would provide for a surety bond by the teachers' association to cover all teachers. The second plan would provide a fund of \$600 to be deposited by the teachers' association with the school auditor, to be drawn upon by the city superintendent and the president of the teachers' asso

-The Superior court of California has ruled that the San Francisco board of education must pay 600 school teachers approximately \$190,000 in back pay. The court held that the city charter is subservient to the state law, which holds that for 100-per-cent work, a feacher must be paid in full for that year not later than June 1.

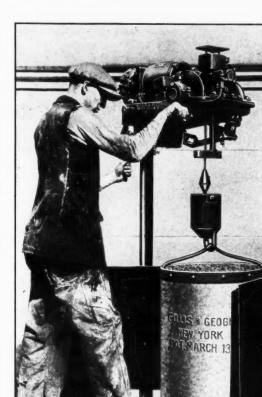
not later than June 1.

The controversy over the payment of salaries goes back to May, 1926, when a resolution was passed changing the fiscal year to run from July 1 to July 1 instead of August 15 to August 15, and ruling that no salaries for teaching performed in one fiscal year may be paid in a subsequent year. This eliminated the paying of salaries amounting to six weeks for the period of June 30 to August 15 in 1926. Although the school board admitted it owed the money, it insisted that teachers wait until leaving the service before collecting.

—A recent opinion of deputy counsel Purdum of

—A recent opinion of deputy counsel Purdum of Los Angeles county, California, upholds the right of California teachers to administer corporal punish-ment. Mr. Purdum ruled that in the absence of a

(Concluded on Page 120)





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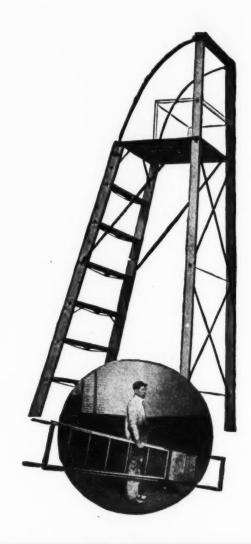
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(Concluded from Page 118)

specific order to the contrary, teachers may use reasonable measures to enforce obedience provided

reasonable measures to enforce obedience provided that this does not conflict with local restrictions.

—Woonsocket, R. I. The school board has approved a general increase in salaries for teachers. Supt. J. F. Rockett was given an increase of \$500, making his salary \$5,000. Prin. Charles A. Donlon of the high school was given an increase of \$100, making his salary \$3,400, and Miss Florence P. Mowry, junior-high-school principal, was given a salary of \$3,300.

Under the teachers' schedule the following was voted: Elementary, minimum \$1,000, maximum \$1,000; junior high, minimum \$1,100, maximum \$1,700; senior high, minimum \$1,300, maximum of \$1,825.

—Philadelphia, Pa. Upon the recommendation of Supt. E. C. Broome, the special salaries committee of the board has begun a study of plans for increasing the salaries of 9,500 teachers in the city schools. Supt. Broome points out that since 1921,

eight years ago, except for an increase of 20 per

eight years ago, except for an increase of 20 per cent in the maximum salary for elementary teachers, and slight increases for other small groups, there has been no general increase in salaries.

—The state board of education of California has adopted a new ruling governing the professional standards to be met by candidates for teachers' credentials. Under the ruling, state teachers' credentials will be issued only upon the recommendation of approved teachers training instituommendation of approved teacher-training institu-tions to applicants who have met the requirements for credentials as adopted by the board.

The minimum training for elementary and kinder-garten-primary credentials, prior to September 1930, has been set at three years. After that date, four years of training, with a bachelor's degree, will be the minimum training required for all credentials, with the exception of the general secondary, which requires a year of gradute study. An applicant who falls short of the required training will be required to enter a college, a university to complete required to enter a college or university to complete the work required for the particular credential.

had 200,136 pupils in average daily attendance in grades 1-8 for the same years, more than double that of the State of Utah. California has relatively a high per-capita valuation per average daily at-tendance when compared with the states which have adopted the county unit. None of those states has had as high professional requirements for teachers

had as high professional requirements for teachers as this state, and their teacher-tenure laws are very different.

These are but a few of the many factors of dissimilarity. They may be favorable or unfavorable to the proposed plan. The validity of conclusions drawn from comparing such states with California is doubtful, to say the least.

Some writers have urged the county unit because it is cheaper. Statistics indicate that in the majority of cases the absolute costs have increased with the larger unit. The writer thinks the added expenses fully justified by the improvements made. To replace poor teachers with good ones to provide adequate school buildings and equipment in the place of the old; to secure comfortable and safe busses for transportation to central points; to furbusses for transportation to central points; to furnish the right kind of bus drivers-morally, mentally and physically—all cost money. It seems entirely reasonable that increased expense should be expected if efficient larger units of any kind are to prevail.

There are those who have compared the county There are those who have compared the county unit with city systems. Too often rival communities are found within the same county. Each has its local organizations working for its upbuilding. Under such circumstances, can anybody expect bond issues for school purposes to carry unless practically all communities are promised a share of the proceeds, regardless of need? Unwise expenditures are sometimes required in order to secure urgent necessities in other localities.

There is another danger which ought to be guarded against. Many school districts have been carefully managed in order to keep themselves in the most favorable financial condition. If such places must share the burdens of districts which are bonded to the limit, will they not also use up their bonding capacity for buildings and other possible improvements as soon as they think the county unit is inevitable?

Why is the county the ideal unit? The boundary lines of the counties were fixed without any thought

### Is County Consolidation of Schools Best for California?

To the Editor:

Several articles have recently appeared criticizing California's school-district system. No unified plan is possible with separate and independent adminis possible with separate and independent admin-interaction of elementary school, high-school and junior-college districts. Neither can one justify the 1,795 one-teacher schools of this state for the school year 1925-26<sup>3</sup>. Marked inequalities in the ability to support education and in the tax rates for schools are admitted by all who know the facts. Neturally differences of oninion exist as to the Naturally differences of opinion exist as to the best remedy. No plan will ever be found which is faultless and free from opposition.

The county unit has been most frequently advocated. Proponents of this plan claim that it is the proper means by which the state may equalize educational opportunities and school-tax burdens. They also assert that county consolidation has worked well elsewhere and is cheaper, and therefore California ought to adopt it.

In order to stimulate a study of this important issue the writer wishes to raise certain questions.

Should California make any radical change be-fore having adequate and valid data presented by competent and impartial investigators? Are people willing to accept the "county unit" as the last pos-sible improvement to be made in school administration, or may not the junior-college district, or some other unit prove more satisfactory for the state? Are conclusions valid if deduced from comparing unlike things? If conditions differ, may not the results vary also?

The Utah school system has been referred to most frequently. For the school year 1925-26, Utah had an average daily attendance in grades 1 to 8 of 91,268, and 24,356 average daily attendance in grades 9 to 12, of regular full-time pupils. This included all the county and city public schools of the State—40 districts. Los Angeles county alone

<sup>2</sup>P. 206, Sixteenth Report of State Superintendent of Public Instruction of Utah. <sup>3</sup>32nd Biennial Report, pp. 104 and 105, State Super-intendent of Public Instruction of California.

<sup>1</sup>P. 20, 32nd Biennial Report, State Superintendent of Public Instruction of California.

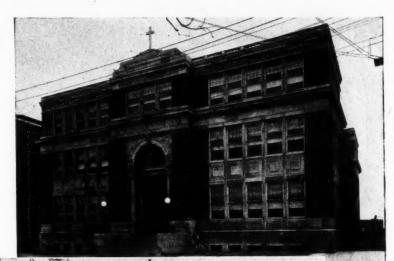
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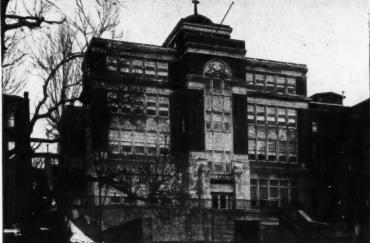
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(Concluded from Page 120)

of school districts. Perhaps more communities would be benefited than injured by using the county lines, but it must be evident to everybody that there are many communities whose interests would be better served otherwise.

Would it not be enlightening to make a survey of the state to plot the logical combinations, regardless of county? In this manner the possible or probable injustices of the county plan would manifest themselves.

If Alpine county with its 16 pupils in average daily attendance during the school year 1925-26 in grades 1-8 is an ideal district, what about Los Angeles county with its 200,000 enrollment? There is not a single county unit in Utah with 10,000 average daily attendance, but there are counties with less than 5,000 average daily attendance. with less than 5.000 average daily attendance, which are divided into two districts.

which are divided into two districts.

Undoubtedly the modified county unit adopted by Utah has brought considerable improvement in the schools of that state. Perhaps some other plan would have been equally, or even more, successful. Certainly all inequalities and weaknesses have not been corrected by county consolidations. For example, the number of days of school for grades 1-8, during the school year 1925-26, varied in the county-unit districts of Utah from 130 in Wayne county to 179 in the Jordan district (part of Salt Lake county)<sup>4</sup>. The former could raise only \$17.33 per child for the local school fund at the maximum levy of 12 mills, while the latter could secure \$65.55 per child with a 7 mill levy.<sup>5</sup>

Again, according to a report presented at the principals' convention at Long Beach, April, 1928: "Mona county is 12 times more able to support secondary education than Nevada county." Similar inequalities exist in the case of elementary schools. Surely no more evidence is required to prove the impossibility of equalizing education convertinities.

Surely no more evidence is required to prove the impossibility of equalizing education opportunities and school burdens within California by using the county as the unit.

The proposed plan probably would be better than the present arrangement. Only after the most thorough study of the conditions and needs of the entire state are made can the best system be intelligently recommended. Too much expense is

involved in a reorganization of such magnitude to take risks which can be eliminated or reduced by adequate investigation.

The time appears ripe for a comprehensive study of the educational conditions and needs of the entire state. Interests of every locality should be carefully studied. Competent committees, free from responsibility to special interests or groups and

supplied with adequate funds from the public treasury, ought to be appointed. It is important to have both lay and professional people serve on these committees to insure the impartial, practical, and complete consideration which this proposition

Claremont, California.

### The Service of the School-Equipment Specialist F. H. Wiese

The average school board in anticipating the many problems which develop in the planning and erection of a large high-school or college building, finds that most of its worries are removed with erection of a large high-school or college building, finds that most of its worries are removed with the selection of a competent architect. For the architect may be expected, and as a matter of routine service, takes in hand the problems of planning and constructing the building and offers acceptable solutions for approval. But, not all problems of a large school building are solved by the architect alone. In the large cities, the school boards have found it necessary to go a step farther in insisting that the architect engage competent engineering service for special branches of work which have so expanded that expert service is necessary. In some cases, the boards have engaged such experts, or specialists, directly, but whatever the plan followed, it is not unusual to find ventilating engineers to solve problems of ventilation, acoustical engineers to revise the plans for auditoriums, and so forth.

Where extensive laboratories are planned, a special laboratory engineer has been found of service. Such a specialist, collaborating with the architect and with the school authorities, will insure the laying out and equipping of the laboratories to produce an economic, efficient, and complete unit or group of units.

His first duty will necessarily be the study of the instructional requirements as set up by the

His first duty will necessarily be the study of the instructional requirements as set up by the department heads and the school executives so that these may be translated into plans and specifications for laboratories which meet every present need. One important consideration will be planning for flexibility, so that future expansion or probable changes in the organization of the de-

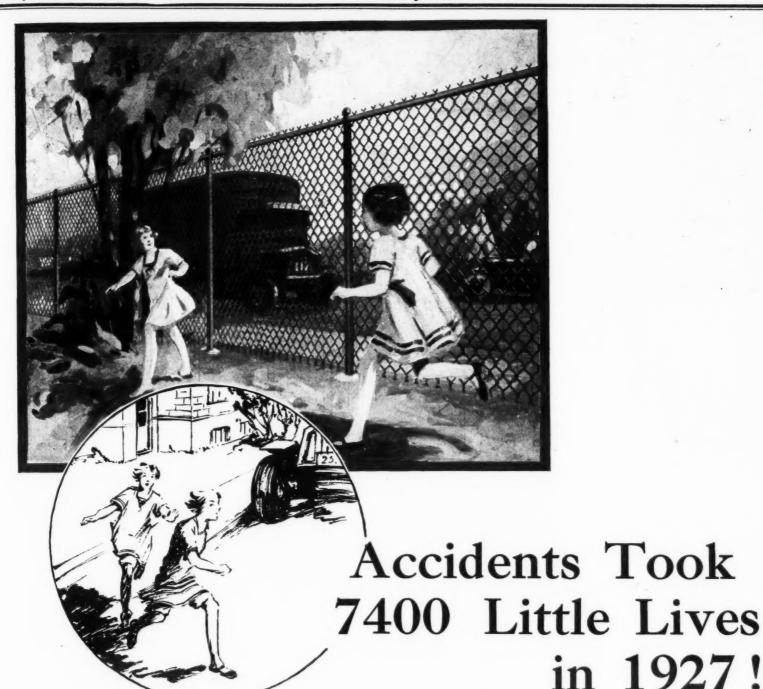
partments and in instructional content and method, will be ready, economical, and with a minimum of change in rooms and equipment. He will necessarily draw up his specifications in such form as to insure the widest competition from reputable established manufacturers, and will utilize every opportunity to insure the purchase of the latest standard models of furniture and equipment. He will utilize his knowledge of the markets to design special pieces only when the stock furniture and equipment cannot be adapted to the available spaces and clear-cut instructional requirements. One of his duties will be a study of the proposed laboratory furniture for correct connection with the water, gas, electrical, and sewerage systems, and with the ventilating system. So seemingly simple a matter as the adjustment of the fume hoods with an adequate exhaust ventilating system is an important part of his work. partments and in instructional content and method, is an important part of his work.

is an important part of his work.

A great many school boards in the past have expected everything from their architects. The architects in turn, who are not ventilating or science-equipment engineers, have gone to the manfacturers of laboratory furniture for their information. This has been valuable, without doubt, because the greatest advance of the past 15 years in the design of laboratory furniture has come from the initiative and foresight of manufacturers who have not hesitated to employ designers and to spend great sums in developing new types of furniture, new inventions, new products. In the furniture, new inventions, new products. In the vast majority of schools it is possible to meet every instructional need in a complete, economical, efficient manner from the newer stock models of the best manufacturers.

(Concluded on Page 124)

<sup>&</sup>lt;sup>4</sup>P. 206, Sixteenth Report of State Superintendent of Public Instruction of Utah. <sup>5</sup>P. 123, Ibid.



This touching obituary is written in the statistics of 1927. These 7,400 little boys and girls waved their last farewell as they started their school day. More of them were 5 to 10 years old than any other ages. Nearly half of the accidents occurred while the children were playing in the streets.

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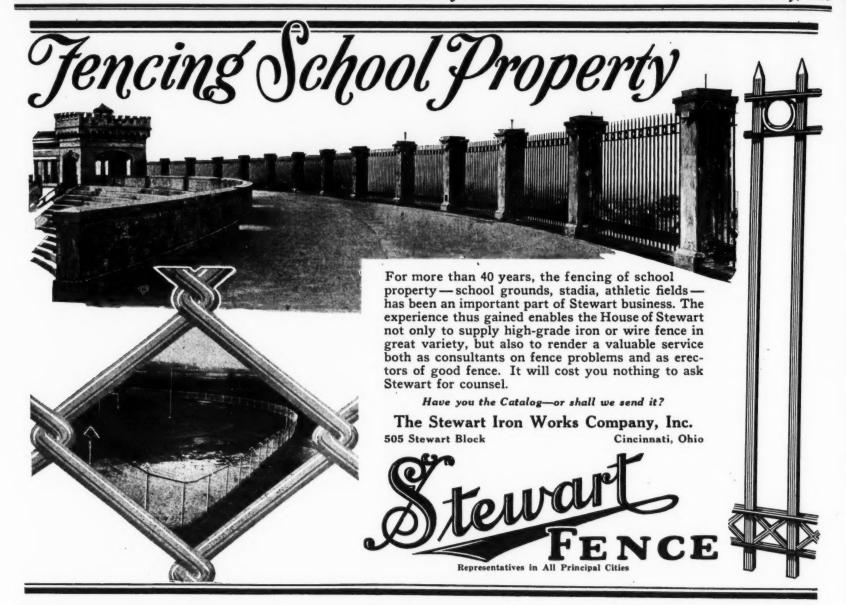
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(Concluded from Page 122)

Granted that the manufacturer's service has been of immense value, it must be remembered that when he is asked to develop furniture and equipment lists for a large laboratory installation, equipment lists for a large laboratory installation, he will only be human and make recommendations and suggestions based upon his own lines. In the case of the small school this help will be distinctly valuable because the amount and character of the furniture to be bought will not permit more than items of widest use and open to general competition. But in the case of the large school or college, it is difficult for the manufacturer to prepare layouts without recommending or specifying exclusive or patented designs or at least so modifying the specifications that his products alone have an opportunity of acceptance. The really important considerations of health, are obscurred or lost sight of under such procedure. The final efficiency and economy of a laboratory The final efficiency and economy of a laboratory unit then depends upon the technical knowledge of the architect and the superintendent of schools and the insistence of the board in checking the recommendations made to it.

When a manufacturer installs an outfit of laboratory furniture in a chemistry laboratory, and guarantees its perfect operation without having had the fume-hood system systematically worked out in conjunction with the ventilating system of the building, it is necessary to have a guarantee of effective operation covered by a substantial bond or other tangible guarantee. Ventilating hoods used to exhaust the disagreeable and dangerous gases generated in the laboratory should be designed, or at least approved, by a disinterested ventilating engineer, for the protection of the health of the student body, the saving of the taxpayers' money, and the instructional result which the instructor of chemistry is seeking.

The fee of an equipment engineer who protects the interests of the school board which employs him, and who takes care of the probable growth of the student body during the fifteen or twenty years that the building will be used, is money well spent. In this day and age, with men trained along special lines, it is always a safe and economical policy to obtain the best engineering talent available.

## THE STATE'S CONTRIBUTION TO THE SCHOOLS; SOME OUTSTANDING TENDENCIES

Katherine M. Cook, Chief, Division of Rural Education, U. S. Bureau of Education Education, U. S. Bureau Washington, D. C.

The last decade has been marked by changing conceptions of the state's responsibility toward the administration and support of elementary and secondary schools. In spite of our commitment to the principle that the states are the responsible agencies for education, through numerous court decisions and by decree of public sentiment, yet schools are and have been local institutions and their administrations and support a local responsi schools are and have been local institutions and their administrations and support, a local responsibility. Aside from setting up machinery for school administration and support, the states with few exceptions have left the local districts free to support their schools liberally or meagerly, and to conduct excellent or mediocre schools as local public sentiment dictates.

Lately we have become more serious in putting into practice principles that we long enunciated in theory—first, that opportunities for elementary and secondary education must be available for all children regardless of local and individual con-

be through state-shared responsibility for essentials including school support.

Certain trends of the past decade in the direction of more state responsibility are: equalization of educational opportunity and tax burden. Scarcely a state has failed within the last ten responsibility are equalized to consider plans to equalize educational

tributing factors including residence, second, that

we are to make that dream come true it must

scarcely a state has failed within the last ten years to consider plans to equalize educational opportunities and tax burdens. This tendency is of the most striking factor in any examination of recent educational literature. Twenty-four states have adopted some type of equalizing measures: adequate funds for school support from state sources; a method of distribution which considers school needs: financial resources and ability; and sources; a method of distribution which considers school needs; financial resources and ability; and some measurement of local effort to support schools. Utilization of new resources of wealth on which to draw for school support. We cannot continue indefinitely to draw on property as the sole source of school support, such a method of taxation is burdensome and unjust, especially for the farmer, who is a large property holder.

Among the newer sources of revenue which are

Among the newer sources of revenue, which are being drawn upon for school support are sever-ance tax in five states, corporation tax in fourteen, tobacco in four, inheritance in eight, and income in six. Revolving funds constitute another growing form of equalization through state financial assistance. Of equal significance is a movement toward making scientific studies in the state for the school financing situation in order that a long-time intelli-gent program may be adopted. Studies of school support from the state point of view were made in Illinois, Connecticut, North Carolina, Georgia, West Virginia, Texas, Utah, New York, Pennsyl-vania, Florida, Virginia, Indiana, and Iowa.

Dubuque, Iowa. An examination of the teeth of 2,500 pupils in 11 city schools since the first of September shows that 2,000 have defective teeth. As a result of the work of the dental hygienist, a considerable number of those with defects are having the defects removed. The report showed that 209 children do not use a toothbrush.

—Maquoketa, Iowa. The school board has offered

free immunization treatment against diphtheria to all school children whose parents give their consent. The action was taken as a precaution against the spread of the disease.



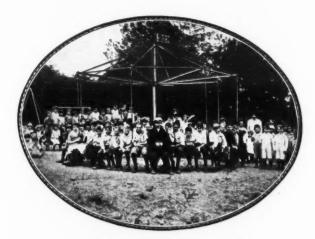
DR. GEO. W. GERWIG, RETIRING SECRETARY OF THE PITTSBURGH BOARD OF EDUCATION, AND HIS SUCCESSOR, H. W. CRAMBLET, WHO WAS ASSISTANT SECRETARY OF THE BOARD

# Equip Your Playground with MITCHELL Playground Apparatus



Give the children for whose recreational activities you are responsible safe, sturdy, correctly-designed equipment with which to build up muscle and mind.

From the Mitchell line it is easy to select equipment for any size or type of school-yard and afford children of every age facilities for healthy amusement and well-rounded exercise. Mitchell Apparatus is designed in accordance with recognized sound principles of physical development and recreation. It has the background of 35 years of successful manufacturing experience. Write today, for free illustrated catalog.



Mitchell Whirl No. 500

The Mitchell Whirl accommodates 1 to 50 children at the same time. Children can board or leave it at will while in motion. Easily operated by a single child. Requires no supervision. Gives many years of service with minimum upkeep. Sturdily built, with high carbon steel angles, trusses and rails.



Mitchell Swing-Bob No. 600

The Mitchell Swing-Bob is ideal equipment for the younger children—furnishing healthful exercise and amusement to from one to twenty children at a time. It is designed to eliminate any possibility of injury. Reinforced platform and continuous guard rails insure safety. Will last many years.

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## GREAT MOTOR MOWER FOR SCHOOLS and COLLEGES

A NOTEWORTHY feature of the new Coldwell "L Twin" Lawn Mower and Roller, is its unique adaptability to a wide range of uses. Especially suited for athletic fields, tennis courts, football grounds, baseball diamonds, etc. Built to give long, dependable service under every condition of usage. Reasonable in price.

There's a size and style of Coldwell Motor Lawn Mower and Roller at the price you want to pay. Your dealer will demonstrate. No obligation. Descriptive literature sent on request.

> Above: Coldwell "L Twin" Motor Lawn Mower and Roller. Mows and rolls 4 to 6 acres a day. With gang units attached, machine cuts 10 acres a day on one gallon of gasoline.

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DEPENDABLE LAWN MOWERS

COLDWELL LAWN MOWER COMPANY, NEWBURGH, N. Y., U.S.A.



# ... better to say it with a fence!

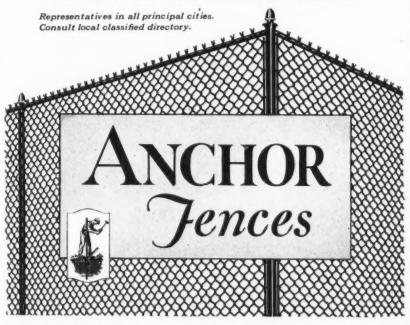
"STAY on the playground"...To the lively boy and girl this is just one of a hundred rules. Just another rule to remember...or to break when the chance comes. Children receive so many commands that little attention is paid to any of them.

The only sure way to keep children on the playground...in safety...is to prevent escape. Children cannot dash into the highway when the playground is enclosed with an Anchor Playground Fence.

You can have Anchor Fence protection for your playground at a very low, yearly cost. The nearest Anchor office is a part of the Anchor National Fencing Service—competent to advise and enclose your playground. Write for information.

ANCHOR POST FENCE COMPANY Eastern Avenue and Kane Street, Baltimore, Md.

Albany; Boston; Charlotte; Chicago; Cincinnati; Cleveland; Detroit; Hartford; Houston; Los Angeles; Mineola, L. I.; Newark; New York; Philadelphia; Pittsburgh; St. Louis; San Francisco; Shreveport



### You never saw such fun as sliding down our Cellar Door



### New, Low-Cost Apparatus especially suitable for Little Folk

Wherever the Fun-Ful Cellar Door Slide has been placed in service it has won the hearts of children and the approval of physical educators. It encourages unlimited mass play and is, therefore, an absolute deterrent to ideas of selfishness, class distinction, or physical inferiority. The more who play, the more fun.

The most fun per child per dollar — and the safest — obtainable. Send for our catalogue of the most complete line of playground equipment made.

The Cellar Door Slide is sturdy and will last indefinitely with ordinary care. It is built of heavy gle iron and hardwood timbers. There are no stairs or steps, a ramp with heavy crosswise cleats sing in a gentle slope to the top platform. The chute is 12 feet long by 10 feet wide and is covered the heavy, rust resisting metal—absolutely smooth and safe.

# HILL-S<u>TANDARD</u> Co. Anderson, Indiana, U.S.A.

## Capacity?

### Over 300 Children with NO danger

The leading feature of the Fun-Ful Cellar Door Slide is its tremendous capacity with absolute safety. A single Cellar Door Slide has been placed at the disposal of three hundred children-with no other apparatus on the ground - with instructions to use the slide as fast as each child possibly could. Under these conditions it proved absolutely impossible to choke the slide or cause the slightest jam or interruption in the steady stream of little bodies pouring over the platform and down the broad slope. The children employed in this test included those of the first to sixth grade, and when their great variation in age and size is considered, it was truly a remarkable demonstration.



### Other FUN-FUL Equipment;

Ball Bearing Giant Stride Improved Ocean Wave Ball Bearing Merry-Go-Round

Revolving Parallel Bars Horizontal Bars

Seesaws

Traveling Rings Swings Basketball Backstops and Goals

Complete Outdoor Gymnasiums and Aquatic Equipment

EQUIPMENT FOR SCHOOL LUNCHROOMS
Zoe Wolcott of Pittsburg, Kans., sent out a
questionary to ascertain information as to equip-

questionary to ascertain information as to equipment employed in the lunchrooms of the high schools and colleges in Kansas.

All institutions reporting equipment had electric dish washers, and almost all mentioned electric mixers, vegetable peelers, and slicers. Can openers, steam cookers, and chopping machines were reported by three institutions; toasters, electric refrigerators, and apple peelers each by two; and the following were listed once: butter cutter, ice chipper, milk pump, vegetable shredder, checking machine, washing machine, grinder, dumb-waiter, machine, washing machine, grinder, dumb-waiter, and belt conveyer to carry trays to the kitchen. Miss Wolcott reports on the several high schools

Miss Wolcott reports on the several high schools from which the following typical statements are taken: "At the Wichita high school the cafeteria serves 2975 each noon with an average ticket of 18½ cents. The cafeteria is not a part of the home-economics department. There are two dining rooms, one for students and one for faculty. Occasionally, dinners are served in the evening to different school organizations. The workers employed include four colored men for full time, 25 women full time, one woman part time, and 88 students who assist during the serving period and are allowed a 30-cent lunch for one hour's work. are allowed a 30-cent lunch for one hour's work.
All prices in the cafeteria are 5 cents or lower, with the exception of meat, which is 10 cents.
The sale of salads has greatly increased since the price was reduced. Students are aided in the selection of well-balanced meals by a discussion of the day's menu in health-education classes."

the day's menu in health-education classes."

"At Central High School, Kansas City, the cafeteria serves 600 meals at noon with tickets averaging 15 cents. Menus are worked out by the food teachers and cafeteria director, who is considered a member of the faculty group. The cafeteria furnishes supplies, and the members of the food classes prepare foods that the girls are working in at the time as a class problem. Five regular workers and 12 students, who are paid in meals, are employed."

"At Seaman Rural High School, Topeka, from

"At Seaman Rural High School, Topeka, from 70 to 90 persons are served a table d'hôte meal at noon for which the charge is 12 cents. Students in the first and second year food classes planmenus, keep books, prepare most of the food, and do all the serving. The routine work, such as preparation of vegetables and washing dishes, is done by the matron. About one third of the girls'

time is given to cafeteria work. During the past six years the annual profit of \$200 has been used for equipment or for some good cause connected with the school."

SALVAGING SCHOOLBOOKS IN BOSTON
Business Manager Alexander M. Sullivan, of the
Boston city schools, in his latest annual report for the school year 1927, discusses the matter of salvaging schoolbooks and shows the savings effected through the employment of bookbinders for the repair of dilapidated books. The idea of salvaging schoolbooks was first broached in the reports for the years 1924 and 1925 when it was recommended that some attempt be made toward salvaging books

which were to be continued in use.

At the present time, two bookbinders are employed, who make minor repairs to books, maps, and charts throughout the school system. During the year 1927, a total of 43,000 schoolbooks were salvaged through contract rebinding, or through minor repairs made by the bookbinders employed.

minor repairs made by the bookbinders employed. The salvaging shows a gain of 65 per cent over the previous year, and a gain of 1,128 per cent over the year 1924. The net saving to the city was approximately \$20,000 for the school year 1927.

The financial saving is very gratifying inasmuch as in 1924 and prior thereto, about 3,500 books were rebound each year, while 26,000 were rebound in 1926, and 43,000 in 1927. In the past, thousands of dollars were wasted due to the fact that the ordering and discarding of books was not properly controlled. In past years, books were discarded hurriedly at the close of the school year, and in many instances without the control of the principal. In a period of ten years, approximately \$1,500,000 has been expended for books, and many thousands of dollars might have been saved for other purposes if intelligent salvaging had been adopted previous to 1924. to 1924.

The great majority of school principals have heartily cooperated with the bookbinders in the work of salvaging the books during the school year and From present indications, the number at its close. at its close. From present indications, the number of books salvaged for the coming year will exceed the number salvaged in 1927 by a substantial amount. Through the cooperation of the principals, many thousands of books which might have been consigned to the junk heap have been salvaged and continued in use. The sums saved at each school through rebinding or minor repairs may be devoted when necessary, to the purchase of additional books, or to other projects which might otherwise have been delayed. otherwise have been delayed.

### THE PROBLEM OF MISREPRESENTATION IN SCHOOLBOOK PURCHASING

Hardly a month passes without one or more letters coming to the state superintendent's office asking if the superintendent requires or has approved certain books or apparatus for use in the

Unscrupulous agents frequently approach members of boards of directors or teachers in rural schools with the statement that such and such book or piece of equipment is required by the state office, or that it is recommended by it.

Mr. F. G. Blair, state superintendent of public instruction of Illinois, in a recent communication to the school officers and teachers of the state, in to the school officers and teachers of the state, in calling attention to the practice, makes it clear that the state superintendent's office does not recommend or approve any book or piece of furniture or apparatus. Mr. Blair points out that this has been the rule of the office for the past 28 years. Under the law, there is published a list of school textbooks, which are officially listed, from which boards of directors or boards of education may select their textbooks. The high-school supervisors have published lists of books for high-school libraries and lished lists of books for high-school libraries also of maps which are recognized by them. There is also a children's reading-circle board, which recommends a list of books for school libraries. Mr. Blair writes:

"When schoolbook or supply agents approach members of boards or teachers with the statement that such a book or equipment is required by the state office, or that it is recommended by it, such a statement on the part of the agent discredits him and his goods when it is made. No doubt there is a great difference in the quality and durability of goods that are offered for sale to school officers, but within certain limits the members of the board must exercise their own judgment in making the selection.

"A reputable firm, recently, upon having its attention called to an unwarranted statement by one of its own agents, immediately repudiated the statement and discharged the agent. That is the atti-tude of all responsible firms which deal with school boards. Every attempt on the part of an agent to secure a sale through misrepresentation should be immediately reported to the firm he represents, as well as to the office of the state superintendent of public instruction."

## No Squirting No Waste With Century





Once outside the school doors children are bound to be playful. It's only natural. But when their play turns to fooling with the drinking equipment it's a different story.

A special feature on Century fountains prevents squirting if the hand is placed over the bubbler top. This foolproof feature keeps the children out of mischief and at the same time saves water. Other economies and the durability of Century fountains make them the logical school installation.

> Write for a catalog of the complete line before you decide.

### Century Brass Works, Inc., Belleville, Ill.



Require the pupils to do the mechanical

work.

FOUNTAINS

15. Be gentle but positive at all times.
16. Do not punish a pupil while angry.
17. Refrain from unnecessary repetitions.
18. Do not require pupils to write words, themes or recite stanzas of poetry as punishment.
It creates a dislike for the subjects.

19. Keeping pupils in at recess and after school is excusable as a matter of accommodation and is never excusable as a means of punishment.

20. Become acquainted with the home environ-

ments of your pupils.

21. Acquaint yourself with the physical defects

of your pupils.
22. Do not engage in factionalisms of any sort.

Be professional at all times. 24. Think of your profession as second to none. Truly no class of people have greater opportunities

for real service.

25. Do not expect sympathy because of your profession. You chose it.

A Continuous School Census for New York City

Acting upon the recommendation of the New York state commissioner of education, the board of education of New York City has made arrangements for taking a continuous school census.

To meet the situation in a practical way, it has been deemed advisable to arrange for a complete census, to be spread over a period of three years. Under this plan, one third of the city will be covered the first year, and the work will be kept up to date through the second and third years. The

THE SERVICE FREEDOM MAY RENDER Freedom has been sought for mankind for four centuries or more. Its apostles have sought it, to the end that the spiritual and intellectual life of the common man might be abundant. It has been too seldom realized that

abundant. It has been too seldom realized that freedom implies the right to waste and neglect and ruin as well as the opportunity to grow and to create and to seek the higher life.

But freedom is young. All that has been hoped may yet be attained. If that culmination is to be achieved, however, our generations will have to learn how their opportunities may be used for the greatest individual and social good.

—Phillip W. L. Cox New York University

-Phillip W. L. Cox, New York University.

## New!

We believe the new Marblmetal hardware is the finest ever put on toilet partitions. The new Marblmetal hinge has been operated by a testing device to equal ten years' service without perceptible wear and it is safe to say that our hinges will last a lifetime. All Marblemetal hardware is chromium plated. Send for folder illustrating and describing the wonderful new partition.

THE MILLS COMPANY

A Mills Metal Partition for Every Purpose 905 Wayside Road, Cleveland. Ohio Representatives in All Principal Cities



THE WORK OF THE HEADS OF DEPARTMENTS IN HIGH SCHOOLS
—The U. S. Bureau of Education has recently issued a report showing the findings in a study of the work of the heads of departments in the large high schools enrolling 1,000 students and over. The study covered such points as the number of departments, the duties of the department heads, and the approximate amount of time de-

ber of departments, the duties of the department heads, and the approximate amount of time devoted to the supervision of instruction, classroom teaching, and other duties.

Of 124 principals replying to the questionary, 108 reported that they have department heads in their high schools. The number of departments in schools varies from 1 to 18, and the median number is 7. The number of periods a week that department heads teach varies from 4 to 15.

In 98 schools the approximate percentage of time department heads devoted to teaching, supervision, and clerical and other duties is indicated by means of a chart showing teaching, clerical and other duties, and supervision. Among the duties listed as "other duties" are committee work, selection of textbooks, interviews, supervising activities, student counseling, and general and special ties, student counseling, and general and special administrative duties.

administrative duties.

A SUPERINTENDENT'S ADVICE TO HIS TEACHERS

Supt. John C. Hammer of Newport City. Tenn., recently issued a series of 25 suggestions which he considers as fundamental to teaching success.

1. Follow your schedule closely.

2. Be explicit in all your directions.

3. Do not spend too much time with slow numis.

pupils.

4. Make your lesson assignment clear leaving no doubt in the minds of the pupils as to what is expected of them.

5. Pass up trifles.
6. Keep a complete set of textbooks for the subjects you teach.
7. Prepare lessons daily.

Do not nag. Refrain from unnecessary scolding.

10. Do not take time to explain to pupils what they already know.

Follow well-organized lesson plans. Refrain from unnecessary prompting. Secure the attention of the pupils before attempting to teach.

census of the second one third will be kept up through the third year, and the third one third will be covered through the third year. Thus, at the end of the third year, the census will be complete, and will thereafter be kept up to date.

A staff of 25 attendance officers, 7 additional clerks, and atlases, equipment and supplies was provided for the carrying out of the work in connection with the census.

### SINGLE-SALARY SCHEDULES FAVORED BY EDUCATORS

Mr. W. S. Deffenbaugh, chief of the city-schools division of the Bureau of Education, in the fourteenth of a series of articles on "City-School Problems," in the U. S. Daily, discusses the single-salary rate, pointing out that the system tends to attract better teachers to elementary schools. Mr. Deffen-

baugh writes:

"The single-salary schedule providing equal pay for equal training and experience, whether the teacher teaches in an elementary or a high school, is growing in favor among city boards of education. Among the advantages claimed for this type of schedule are the following: Teachers of superior ability and training are attracted to the elementary schools; class consciousness among teachers is largely eliminated; high standards of professional attainment are emphasized and professional study attainment are emphasized and professional study and growth are encouraged among the ele-mentary-school teachers; teachers may be transferred without financial loss from positions to which they are not adapted to positions in which they can render efficient service, for example, some per-sons teaching in the high school may be better adapted to elementary-school work, but if the salary

adapted to elementary-school work, but if the salary is less in the elementary schools they would suffer a financial loss if they were transferred. The single-salary schedule guards against such loss.

"One of the arguments advanced against the single-salary schedule is that it costs too much, since the increased expenditure for instruction would be considerable if all the teachers placed in the elementary schools were college graduates and put in the same schedule as high-school teachers. However, no attempt should be made to economize at the expense of the elementary school. The main point for boards of education to discuss and decide is whether elementary-school teachers should have the same number of years of educational and professional preparation as high-school teachers.

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ers.

# SCHOOLS - - - NOW SAVE 60 to 90% of overhead



## Modern , Correct - and Sanitary !

School Superintendents who are now saving methods, is conspicuous among the nationwide from 60 to 90% of their former towel expense, know that Sani-Dri equipment eliminates other undesirable elements as well.

No wet or soiled paper litters up their washrooms. In refreshing contrast - clean, neat, sanitary lavatories.

The same sweeping improvement over former

users of Sani-Dri HAIR DRYER (See Illustration). Prevents colds and other attendance reductive ills. Saves time in the dressing room dries in one-third the time.

At the coming convention ask any Superintendent whose schools are equipped with SANI-DRI. Better still, write us today for complete information.

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SEND COUPON TODAY FOR FULL INFORMATION

Address.... Name of School..... Title..... Signed By.....

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A corridor in the new Eastern High School,

## All-Steel-Equip Company

200 JOHN ST. Main Office and Factory AURORA, ILL.

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Philadelphia-134 N. 4th St.

### APPEARANCE IS IMPORTANT BUT NOT ALL

ILL the lockers you buy this year serve the boys and girls who are attending your school five - ten - fifteen years from now?

If they are A-S-E lockers, they will.

Assurance of this lies in the number sixteen gauge non-rigid door-the rugged concealed hinges-the steel angle frame and overlapping body members. Unusual stresses may distort the door of an A-S-E locker, but the resilience of the steel brings it back instantly to alignment. And so with all the other parts of these lockers – boyish pranks often give them violent abuse, but built into A-S-E construction is the sturdiness needed to withstand this rough treatment through the

You can obtain details by writing for locker catalog C-25. A-S-E engineers will gladly assist in the preparation of your plans for locker equipment. This will not obligate you.

A. C. Monahan, Formerly U. S. Bureau of

Education
Retail prices of building materials show little change during the past two-year period, according to the monthly reports of the division of building and housing of the Bureau of Standards of the U. S. Department of Commerce. Figures are secured each month through the census bureau showing the average prices paid each month by contractors for building materials delivered on the job in approxi-mately 55 cities distributed throughout the country

mately 55 cities distributed throughout the country and on 24 of the most common building materials.

Propaganda in Public Schools

To further his efforts to close the channels through which privately owned electric utilities have been disseminating propaganda, chiefly through the schools and the press of the nation, Senator Thomas J. Walsh of Montana, a leader in the Congressional investigation that exposed the insidious methods employed by the "power lobby," will demand public hearings at this session on two bills which will restrict activities of educators and newspapers.

newspapers.

Those to be summoned will include men of Those to be summoned will include men of prominence, whose names were brought into recent hearings as having performed services for the propaganda organizations of the power interests. These services, usually took the form of writing pamphlets and books in which the virtues of privately owned utilities were sung and the evils attendant upon public ownership vividly depicted. The bill which he has introduced to curb "inspired" textbook writing makes it unlawful for any person or group of persons engaged in interstate commerce to offer, or to give anything, of value to any teacher or member of any school board for written matter for use in any school.

The same restriction would apply to the giving of anything of value to a teacher or school official to teach or expound any doctrine, dogma, or theory with intent to influence opinion in favor of any

with intent to influence opinion in favor of any particular governmental action advocated by or beneficial to persons or firms engaged in interstate

The provisions of the bill make it unlawful for associations, such as maintained by the utility

groups, to pay educators to speak at dinners or public meetings on any subject on which is pending legislation in which the members of the ciation are interested.

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ciation are interested.

His second bill is an amendment to the postal regulations and provides that no publication entitled to or claiming second-class postal rates shall print any reading matter for pay, or furnish in substance by any person, association, or corporation paying for display advertisements in such publication, knowing it was so furnished, unless the fact that it was so provited or paid for shall be plainly indicated in a statement published in connection with such reading matter.'

The bill gives the postmaster-general authority to withdraw the second-class mailing privileges from newspapers violating it provisions. These provisions, it is provided, may be restored after six months in the discretion of the postmaster-general.

Teachers' Institute in Washington

The Washington public-school system follows a plan of monthly institutes, each of one or two hours' duration, and held in the late afternoon or evening, rather than the all-day institute as in the past. The plan is meeting with success.

Reorganization of Government Departments Considerable interest is displayed in Washington the present time relative to a possible reorgan-Considerable interest is displayed in washington at the present time relative to a possible reorganization of the government departments. There seems to be many people in position to know something of the plans of the next administration, who believe that a serious attempt will be made to reorganize the departments along the lines laid down in the report of the special commission, headed by Walter F. Brown, provided by Congress at the beginning of the Harding administration. This committee was composed of a group of senators and congressmen with the presidential appointee as chairman, and its report accepted by Congress and the plan of reorganization proposed by it, made a plank in the Republican platform at the Cleveland Convention in 1924.

Little progress has been made in getting at action by Congress because of an effective opposition from department heads, bureau chiefs and others, through friends in Congress. It is felt now that definite action will be taken because of the increased popular interest in the recent presidential campaign by both presidential candidates.

by both presidential candidates.

Under the Brown report and recommendations, most of the independent bureaus and commissions

would be placed under departmental authorities. Bureaus and offices would be shifted from one department to another, so that those having an intimate relation to each other would be in the

intimate relation to each other would be in the same department.

Educators are particularly interested in the proposal of what would amount to replacing the interior department with "department of education and welfare." This department would contain four major divisions, each under an assistant secretary. In the division under the assistant secretary for education would be the U. S. Bureau of Education, the Federal Board for Vocational Education, the Indian schools, Howard University, Columbia Institutions for the Deaf, and the Smithsonian Institute.

Under the assistant secretary for public health would be the Public Health Service and the various government hospitals, not including those of the army and navy. Under an assistant secretary for social service would be the women's bureau, the children's bureau and the superintendent of federal prisons now in the Department of Justice. Under the assistant secretary for veteran relief would be the assistant secretary for veteran relief would be the Veterans' Bureau and the Bureau of Pensions.

Five-Year Building Program, Washington, D. C.

A bill before Congress authorizes a second five-year building program for the public-school system for the District of Columbia, which will provide school buildings adequate in size and facilities to make possible an efficient system of public education. It is intended to eliminate the use of portable buildings, rented buildings, and undesirable and antiquated rooms, to keep elementary-school classes to a standard of not more than 40 per class, to provide a five-hour day of instruction for elementary-school pupils, eliminating part-time classes, and to provide for an increasing enrollment in the next five years.

The bill provides no appropriation but opens the way for annual appropriations as the money is needed. Estimates of expenditures for buildings and grounds during the five-year period will be prepared in accordance with the provisions of the act. Congress will be asked each year to provide a sum of money equal to one-fifth of the total cost of the second five-year school-building program.

In its provisions, the second bill is quite similar to the five-year building-program act passed five years ago. This was never put into operation as A bill before Congress authorizes a second five-

(Concluded on Page 132)

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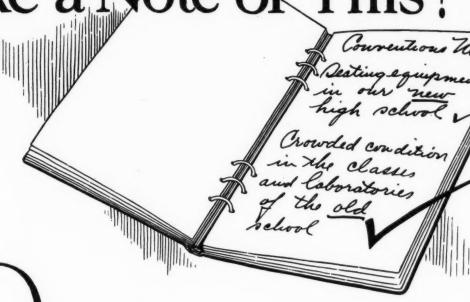
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NE Type of School Seating for EVERY School Laboratory Need

The day when school seating meant "anything to sit on" has long since passed. Today's problems involve new requirements and have resulted in the introduction of the

## LAW NON-COLLIDING CHAIR

This type of seating which is so rapidly replacing both fixed seats and ordinary movable chairs in laboratories, domestic science and commercial classes, is unique. The saddle seat and correct posture back compel a comfortable, attentive position which aids discipline and promotes learning. Correct position of chairs is assured at all times yet freedom of movement is not curtailed thus promoting classroom orderliness without imposing unnecessary restriction. The roller wheels which move smoothly and noiselessly across any floor do away with all scraping of chairs and consequent damage to floors. Cleaning of floors is made easier because a touch of the brush or cleaning tool sends the

chair to one side out of the way. Because a sturdy pedestal supports *all* the weight of the occupant and because tilting is absolutely impossible, the chair is safe. All contact between desk and chair is positively prevented by the patented mechanism, thereby protecting both desk and chair and materially reducing repair and maintenance costs. And last but not least—the Law Non-Colliding Chair *increases the pupil capacity* of any classroom, new or old, because nineteen inches of knee space is the only requirement for satisfactory operation—the pupil occupying or arising from the chair in a side position instead of pushing it back away from the desk.



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Sheldon furniture is the result of 30 years of specialization in building laboratory furniture for 15,000 schools and colleges, and is manufactured by the largest factory of its kind in the world. Therefore, if you are looking for the most practical, the most durable, and the most beautiful furniture for your institution, do not fail to personally inspect Sheldon Furniture while at the Convention. A staff of Sheldon Equipment Engineers will be in attendance to help you with your equipment

### E. H. SHELDON & COMPANY, MUSKEGON, MICHIGAN

(Concluded from Page 130)
Congress failed to appropriate the money required each year to follow the program. At the present time 221 additional classrooms are needed for elementary schools to eliminate portables, rented quarters, undesirable rooms, part-time classes, and to reduce oversize classes. In addition, 140 classrooms are needed to replace those in use in build-

to reduce oversize classes. In addition, 140 classrooms are needed to replace those in use in buildings no longer fitted or safe for school use.

This second five-year school-building program
would require expenditures totaling approximately
\$5,750,000. This is intended to supplement the
amounts requested in the first five-year building
program, so that approximately \$11,000,000 is
actually required for the completion of the first
five-year school-building program and for the
proposed second program.

five-year school-building program and for the proposed second program.

Cement for Slate Roofs

The U. S. Bureau of Standards is making tests on slater's cements for determining the adhesive and cohesive properties of such materials under conditions simulating those of service. The intended purpose of slater's cement is to produce and maintain a waterproof joint between slate shingles on the roof. The material is called upon to withstand rigorous weather conditions and will remain sufficiently plastic to accommodate itself to structural

the roof. The material is called upon to withstand rigorous weather conditions and will remain sufficiently plastic to accommodate itself to structural movements.

Previous tests have been confined mainly to determining the effects of high and low temperatures on the physical state of the cement. The new test was designed to determine if structural movements of a given magnitude will break the joint and permit leakage.

The test is modeled on a procedure now in use for testing "elastic pointing materials." A joint is made of two blocks of stone, one of which is fixed, and the other so arranged that it can be moved toward or away from the fixed stone by means of a thread and nut. The movements can be accurately controlled and measured by a gauge between the two blocks. A cavity is made in the end of the two blocks in such a way that it will hold water when the joint is sealed with the material to be tested. In testing a slater's cement, strips of slate shingles are sealed to the ends of the stone with sealing wax, and then the joint is made between the slates with the cement. After the joint has set for one month, the cavity is filled with water. If no leaks are noted, the joint is stretched a small amount to simulate the effect of a structural movement. structural movement.

Experiments completed indicate that a joint of slater's cement is usually capable of withstanding a movement of 0.01 inch at 70 degrees F. after a drying period of one month, and some tests have indicated considerably high values. This procedure seems to offer a satisfactory means of comparing different cements of this nature and to afford a basis for improvement of the product.

### CHICAGO CORRESPONDENCE

CHICAGO CORRESPONDENCE

Chicago's school-building program, although relegated to the background by more sensational happenings such as the McAndrew trial, shows an extraordinary attempt at constructive service to the city. During the calendar year, 1928, there were ten new elementary schools opened with a seating capacity of 9,120. These schools are known as: Ft. Dearborn, Bennett, McKay, Boone, Stone, Onahan, Tonti, Barton, Reinberg, and Hookway. Six elementary school additions were opened with a total seating capacity of 3,808. These schools are: Marquette, Lowell, Bryant, Clay, Willard and Raster. Three new junior high schools were opened—the Manley, the Kelly and the Foreman. They have a pupil capacity of 7,000. An addition to the Spalding School for Crippled Children provided 1,200 seats. Thus, 1928 saw a total of 21,128 new seats provided for Chicago school children.

children.

In attempting to overcome the accumulated shortage of accommodations which dates back to war time, the board of education has undertaken building program. Besides the a tremendous building program. Besides the twenty projects opened during 1928, there are now under construction or else formally authorized for under construction or else formally authorized for construction, additional projects providing approximately 78,550 seats. These are distributed as follows: Senior high school, 27,400 seats; junior high school, 25,500 seats; elementary school, 23,450 seats; special schools, 2,200 seats.

Charles E. Gilbert, veteran secretary of the Chicago board of education, claims a unique "world's record." Charley (as everyone calls him) has signed his name five million times sime 1912—on pay checks!

on pay checks! At present th on pay checks!

At present there are 15,145 regular and special teachers most of whom receive twelve pay checks a year. To these must be added thousands of office and special employees other than teachers.

These checks bear the names of the mayor, the city comptroller, and the president and secretary of the board of education. All but the secretary's

name are lithographed. Under the law, these persons must execute his signature in long hand on each cheek. The secretary falls heir to this task—hence his "world's record."

This example of faithfulness to the routine phase

this task—hence his "world's record."

This example of faithfulness to the routine phase of his job, moved a Chicago newspaper reporter to poetry, the theme of his poem being that Charley's pen has drained an ink Mississippi "at the times his John Hancock to checks he has signed!"

Supt. Wm. J. Bogan recently cooperated with the Department of Elementary School Principals of the N.E.A. when he sent to all Chicago schools in his official bulletin, a statement prepared by Herman Ritow, principal of the Hayes School, Chicago, and national chairman of the enrollment committee. The statement urged all Chicago elementary school principals to join the D.E.S.P.—"the greatest influence toward raising the financial and professional status of principals."

Previously, Supt. Bogan had encouraged a large delegation of Chicago school people to attend the mid-winter meeting of the N.E.A. to be held at Cleveland, February 24 to March 1.

The president of the Chicago board of education, Mr. H. Wallace Caldwell, holds a particularly unenviable position in one respect. To him falls the job of initiating some method of securing a large increase in school revenues. He is spurred on by an approaching crisis which will arrive not later than this fall.

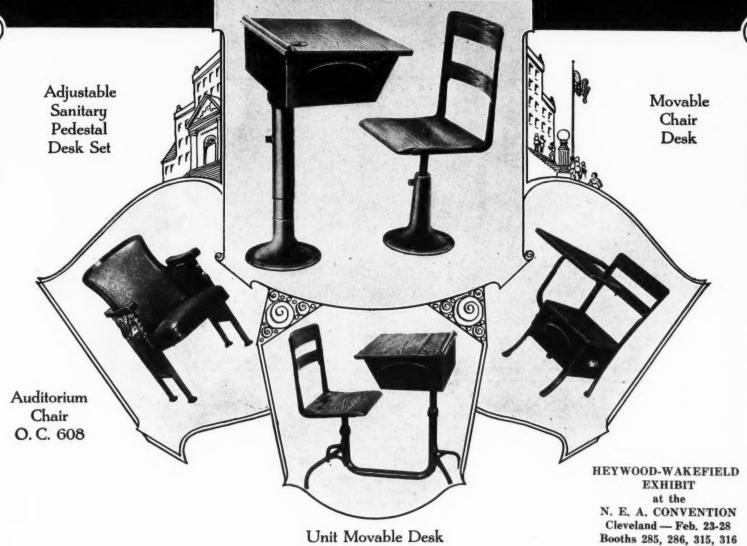
For some time the schools have been getting into

than this fall.

For some time the schools have been getting into debt further and further, until now they have practically exhausted their borrowing power. The trouble seems to center around the well-known fact that school attendance has increased much faster during recent years than city population, and particularly faster than the assessors have placed additional property valuations on the tax books. Mr. Caldwell apparently wants to get school revenues on a sounder basis and has suggested that some scheme be worked out which automatically provides added revenues as added burden is taken

Some people are urging that the school board wait on the results of the reassessment of properties now going on. On the other hand, the schools might lose out, if the reassessment provides for little or no increase in totals. Mr. Caldwell has stated that he believes there is sufficient safeguard against extravagant use of large sums (assuming

(Concluded on Page 134)



Unit Movable Desk

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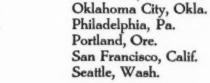
Such features as the shape of every seat, height from floor, distance from desk to desk, slant and curve of back, and many other essential points have been scientifically worked out in the building of this school furniture.

Before you decide about school seating, send for a catalogue or, better still, ask a representative to call and explain to you why Heywood-Wakefield school furniture will improve classroom efficiency.

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(Concluded from Page 132)

(Concluded from Page 132)
he secures new revenues now and shortly thereafter the reassessment shows large increases), namely, that the city council has to pass on the budget, and the budget for a year is already fixed and cannot be changed without council action.

Added revenues are possible by two principal methods. The law permits a tax levy referendum to increase the rate. Many feel that this would be voted down because it would place a greater burden on real estate, already heavily taxed. It is a direct tax. a direct tax.

burden on real estate, already heavily taxed. It is a direct tax.

Others favor an indirect tax. Mr. Caldwell has directed the school-board attorneys to study "all conceivable methods" of securing new revenues through legislative action by the 56th General Assembly. Such methods as the following have appeared in the newspapers: An income tax, a gas tax, a tax on coal, on tobacco, on theatre tickets, tightening up the personal property tax so less property may evade it, revision of the inheritance tax, and possibly a redistribution of the present school-board funds. For example, the educational and building funds of the board of education are separate. It has been suggested that part of the present building-fund tax levy be diverted to the educational fund. This would require the construction of buildings by bond issues. However, it would not add anything to the present generation of taxpayers' burden, although interest on bonds would begin to accumulate.

It seems likely that any one of these indirect methods might be administered through the state distributive fund.

methods might be administered through the state distributive fund.

At best, the president of the school board is confronted with one of the most unpopular tasks ever faced by the head of a school system.

PROGRESS OF SCHOOL BUILDING IN MILWAUKEE

—Milwaukee, Wis. Supt. M. C. Potter recently presented a revised five-year program to the board of education. The program as outlined, provides for an enrollment of 83,000 pupils by 1934, an increase of 1,650 pupils a year. The annexation of the North Milwaukee schools has added 1,700 pupils to the city school system. To take care of these pupils, the new program provides for the erection of twenty-seven buildings, at an estimated cost of \$10,375,000. In addition, \$1,134,000 is needed to complete buildings now under way, above balances now on hand, making the total requirements of \$12,459,000 for the five-year period. Of

the total amount, \$6,580,000 is to be provided from bond issues, and \$5,044,000 from taxation, a total

bond issues, and \$5,044,000 from taxation, a total of \$11,624,000, leaving an estimated deficit of \$835,000 at the end of the total period.

The largest enrollment increase is in the high schools, and the buildings included in the new program will have a capacity of 19,390 pupils. While this is larger than needed under a perfect adjustment, some of the buildings will not be completed in 1934, and migration from the center of the city will leave some of the older buildings partly filled.

Of the twenty-seven new buildings to be erected

partly filled.

Of the twenty-seven new buildings to be erected in the next five years, fourteen are elementary schools, 4 are additions to elementary schools, 3 are prevocational schools, 3 are junior high schools, 1 is a senior high school, 1 is a combined junior-senior high school, and 1 is an addition to the trade and technical high school.

Commenting on the progress made in the carrying out of the program, Mr. Potter points out that



MRS. SUSAN M. DORSEY, Who Retired on January 1, from the Los Angeles Superintendency.

of seventeen items recommended in 1923, all but four have been carried out. Of the 32 proposed buildings contained in the 1927 revision, seven of the first ten are completed or under construction.

### "ALL IN A LIFETIME"

### Mrs. Dorsey Retires at Los Angeles

The rapid development of America is shown in nothing more vividly than in its schools. In many places in the United States this story could be duplicated, no doubt, but take, for example, the forward movement of the Los Angeles schools during the work-time of its recently retired teachersuperintendent, Mrs. Susan M. Dorsey.

When Mrs. Dorsey was employed as teacher of Latin in the one Los Angeles high school in 1896, there were but 4,679 pupils enrolled in the town, and the city superintendent was paid \$125 a month. At that time she was merely one of 72 teachers.

On January 1, 1929, she resigned voluntarily on On January 1, 1929, she resigned voluntarily on her 72nd birthday, from the position of city superintendent, where she received a salary of a thousand dollars a month and supervised a force of 8,976 teachers, in charge of a school enrollment of 355,735 pupils. The Los Angeles schools have a budget of \$32,601,410, and the present value of land, buildings and equipment is close to \$110,000,000. "All in a lifetime"—or rather, less than half of her lifetime! half of her lifetime!

Back in 1873, when there was one small school building in the village, the board of education wrestled with the half-day session problem; and never a time since has this specter departed. In 1924 there was "one third of a seat for each child"; but during Mrs. Dorsey's incumbency as superintendent \$61,530,000 have been voted for school purposes and the building program has made rapid progress, greatly improving the housing condition.

The "big sister" movement among the older girls was inaugurated by Mrs. Dorsey, greatly to the good of younger girls entering advanced classes.

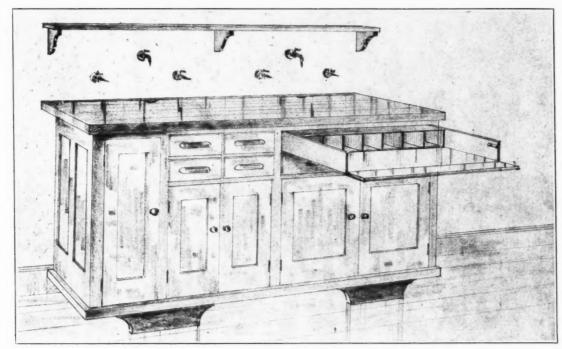
Mrs. Dorsey was one of the first to approve the visual method in education and to install motion picture films in the classrooms; and with the appearance of radio five years ago, she grasped the opportunity for instruction in the schoolroom.

In accepting her resignation regretfully, the head of the board of education of the Los Angeles school system exclaimed, "I feel we are losing the best superintendent that this city has ever had!"

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### Laboratory and Vocational Furniture Department



CHEMISTRY DESK

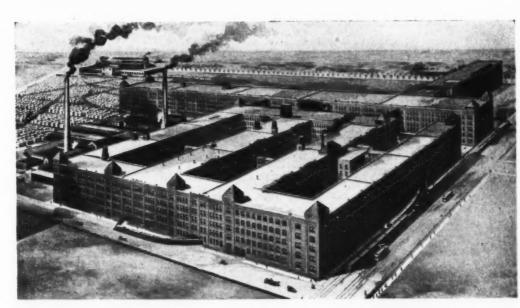
with separate service shelf, leaving entire top clear for working space. Right hand side of table has desk for taking notes or other work.

When going to or returning from the ANNUAL CONVENTION, DEPARTMENT OF SUPERINTENDENCE, OF THE NATIONAL EDUCATION ASSO-CIATION to be held in Cleveland, Ohio, in February you are cordially invited to visit our Permanent Exhibit of Laboratory and Vocational Furniture, 8th Floor Kimball Hall Building, Chicago; also to take an interesting trip through our factory. It is really a ten mile trip just to walk through the KIMBALL PLANT, with floor space of more than a million square feet.

A factory of such gigantic proportions, grown from a small shop to the largest and finest of its kind in the world, demonstrates a growing confidence, which in itself provides ample protection to our customers.

Your time will be well spent by such a visit. You can see Laboratory Furniture, Pianos, Pipe Organs, etc., in process of making from the raw material to the finished product.

THE KIMBALL **FACTORIES** 



CHICAGO, ILL.

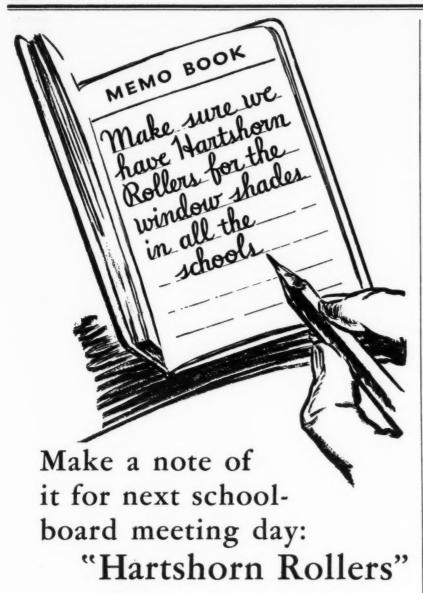
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Department of

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## THE DUTIES OF PUBLIC-SCHOOL ADMINISTRATORS (Continued from Page 41)

The field of special services administrators. shows the smallest percentage of possible performance, the administrators performing on the average only 38, less than a third, of the 116 possible duties. This is accounted for in a large degree by the fact that many of the possible duties, such as are involved in the supervision of the lunch period and the transportation of pupils, are not met with in all administrative positions. The same situation may be found in the field of business administration, in which only 36 per cent of the possible duties are performed on the average. Here a considerable number of the duties associated with building activities probably were not open to many of the 473 administrators. Notwithstanding this fact, the total number of duties (55) actually performed on the average in the field of business administration is the second largest of the nine subordinate fields, although closely followed by the number of duties (53) associated with the administrative control of pupils.

Variations Between Types of Administration Officers

Finally, it is possible to distinguish a number of noteworthy differences in the general per-

formance of duties on the part of the four different types of administrative officers included in this survey; namely, superintendents, general principals, high-school principals, and elementary-school principals. These differences are specifically revealed in Table IV and Figure

The differences in the nature and scope of duties which are revealed in Table IV and portrayed in Figure 2 are interesting. A study of the lower line of totals in Table IV indicates that the superintendent of schools performs a significantly wider range of administrative duties on the average than does any of the other administrative officers. The superintendent's annual work covers 462 different duties. The general principal, who is in charge of both elementary and high-school grades, comes next with 419 duties; then comes the high-school principal with 394 duties; and finally the elementaryschool principal with the narrowest range of work, which covers 351 duties. These figures, of course, refer to the range of duties and have no bearing upon the frequency with which they are performed.

The contrast in the range of duties of the four types of administrators described above is carried out with few exceptions in the nine

C. HIGH-SCHOOL PRINCIPALS I /////// 36 II WILLIAM STATE 111 7/////// 42 III WINNING CA 37 7////// 37 V VIIIIIIII 53 VI 7///// 29 VI /////// 34 VII ////// 38 WII /////// 39 VIII 7////// 42 IX 7////// 38 IX 7///// 33 D. ELECTRICARY-SCHOOL PRINCIPALS B. GENERAL PRINCIPALS 1 7//////// 37 3 7////// 31 H THIRMINING H 111 /////// 40 TV (//////// 38 IV ////// 29 YIIIIIIIIII 53 VI 7////// 27 VI //// 21 VII 7/////// 39 VII ///// 25 VIII W///////// 43 

FIG. 2. FOUR GENERAL PROFILES OF ANNUAL DUTY PERFORMANCE BASED ON THE AVERAGE PERFORMANCES OF (A) 278 SUPERINTENDENTS; (B) 66 GENERAL PRINCIPALS, (C) 86 HIGH-SCHOOL PRINCIPALS, AND (D) 41 ELEMENTARYSCHOOL PRINCIPALS.

The various fields of administrative service represented are: I. General control; II. Executive management; III, Business management; IV. The teaching staff; V. The pupils; VI. The curriculum; VII. Special activities; VIII. Instruction, and IX. Special services.

TABLE IV. THE RELATIVE NUMBERS OF ADMINISTRATIVE DUTIES PERFORMED BY DIFFERENT TYPES OF ADMINISTRATIVE OFFICERS. THE DATA INVOLVE 278 SUPERINTENDENTS, 66 GENERAL PRINCIPALS, 86 HIGH-SCHOOL PRINCIPALS, AND 41 ELEMENTARY-SCHOOL PRINCIPALS

Average Number of Duties Performed by High Elemen Elementary-School Principal General Type of Duty Performed Super-School Principal intendent General Control
Executive Management
Business Management
The Teaching Staff
The Pupils
The Curriculum 37 82 51 38 53 27 39 52 40 36 83 42 37 53 29 39 42 33 89 64 49 53 34 38 48 38 riculum ..... Special Activities
Instruction
Special Services Activities Total .....

subordinate fields of administrative service. The profiles exhibited in Figure 2 are strikingly similar. The superintendent quite generally performs a greater variety of duties in each of the minor fields than any of the other administrative officers. Then, in most of the divisions, follow in turn the general principal, the highschool principal, and the elementary-school principal. This exact order of ranking breaks down, however, in a number of places, particularly in the fields of special activities, instruc-



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tion, and special services. In the field of special activities, for example, both the highschool and the general principal perform more duties (39) than the superintendent (38). The general principal performs more duties (52) in connection with instruction than the superintendent (48). Both the general principal with 40 duties and the elementary principal with 39 duties perform a wider range of duties than the superintendent with 38 duties in the field of special services. This is the only field in which the elementary-school principal is near the top in range of duties. Generally speaking, the profiles (see Fig. 2) show very similar contours, with a gradual shrinkage in the range of duties from the superintendent down to the elementary principal.

In several of the divisions, the four groups of administrative officers perform approximately equal numbers of duties. There is, for example, relatively little difference among the four groups in the number of duties associated with V. The Pupils (53-53-53-49); with VIII. Instruction (48-42-52-43); and with IX. Special Services (38-40-33-39). The most outstanding differences between the groups are in the field of general control, in which the superintendent performs 40 per cent more duties than the average of the three other groups of administrators; in the field of business management, in which he performs 45 per cent more; with the teaching staff, where he performs 40 per cent more; and in connection with the curriculum, where he performs 31 per cent more duties. These four fields: general control, business management, the teaching staff, and the curriculum, make up the chief additional demands in the range of administrative service which distinguish the work of the superintendency from that of the various types of principalship. This,

of course, views each group of subordinate duties as a unit and pays no attention to frequency of performance. When the various unit duties are treated independently from the major group to which they belong, numerous exceptions must be made. Moreover, it is necessary to consider the actual duties performed, rather than the group averages, in order to characterize the work of administrative officers with the degree of accuracy which is essential to the objectives of vocational analysis. Such detailed consideration will be given in connection with a special treatment of each of the nine major subordinate divisions which are to be described in turn in the articles to follow.

### FEDERAL CONTROL OVER STATE EDUCA-TIONAL POLICIES AS REVEALED BY SUPREME COURT DECISIONS (Concluded from Page 42)

according to the dictates of his own conscience, and generally to enjoy those privileges long recognized at common law as essential to the orderly pursuit of happiness by free men."<sup>5</sup> The court ruled accordingly that (b) "a law depriving teachers who had made special preparation to teach some foreign language the right to teach was depriving that teacher of property without due process of law."<sup>5</sup>

The third Supreme-Court decision related to a law in Washington which made it unlawful for a teachers' agency to accept or collect fees for helping teachers secure positions. The decision was rendered in the case of Adams v. Tanner.<sup>6</sup> The Supreme-Court decision read: "No state can make or enforce any law which shall abridge the privileges or immunities of citizens of the United States, nor shall any state deprive any person of life, liberty, or prop-

<sup>5</sup>Nebraska District of Evangelical Lutheran Synod of Missouri et al v. Kelvie, 175 N. W. 581; 7 A. L. R. 1688. Also Meyer v. State of Nebraska, 262 U. S. 390. <sup>6</sup>Adams v. Tanner, 244 U. S. 590. erty without due process of law; nor deny to any person the protection of its laws." The significant point of this decision was that "the Supreme Court can review any police legislation of the states."

The Supreme Court as Final Authority
The decisions quoted above represent a changed and changing attitude on the part of the Supreme Court of the United States not only in relation to public education, but in relation to other phases of social, industrial, and economic activity as well. Previous to 1890 the doctrine of noninterference was strictly exercised in all matters delegated to the states under the permissive powers of Article X. Since 1890, Federal control has been gradually extended, and Article XIV has been read to protect citizens against unreasonable encroachment by the police authority of the states and in the lawful exercise of the rights, privileges, and immunities of life, liberty, and property. Education is essentially a state function. The Federal Government does exercise the right, however, to render final interpretation and exercise final jurisdiction in the legislative and constitutional enactments of states. It sits in review over the police power of the states, to protect the people against arbitrary and unreasonable restraint not necessary to the competency of the state.

### THE PRINCIPAL AS SUPERVISOR (Continued from Page 52)

are from 8:30 to 9:30 a.m. and from 1:00 to 2:00 p.m., or other hours that are more convenient, and that he will not be available for conferences at other times.

3. He will carefully plan his program of supervision, dealing with related matters only at any one time. For example, one week may be given to the problem of organization of teaching materials as used in the classroom, an-

(Concluded on Page 140)



### Makes Harmonica Part of Regular School Work

Says Supervisor of Schools in Paducah, Ky.

### A Really Practical Aid to the Teacher in Inspiring Interest of all Pupils in Music

THE training of a "musical ear" in children and the ability to read music at sight readily -the bugaboo of most teachers—is now stimulated to a very large extent by the intro-duction of the harmonica as a part of the regu-lar musical curriculum in thousands of schools. This modern method of teaching music successfully reaches thousands of boys and girls who have had very little love for music in the past and creates, not only interest, but a real enthusiasm for performance.

### Inculcates True Musical "Taste" **Develops Character**

Children of every age enjoy the harmonica. They are inspired by the fact that they can produce "real music" so quickly and with so little effort, and from this point, it is an easy matter for the teacher to lead them into a greater interest in music and its appreciation.

With the desire to play aroused—with the ability to read notes—the next step lies in encouraging the formation of bands or orchestras. It has been found repeatedly that even pupils who are generally unruly and backward in their formal studies are attracted to a school when other means fail, by membership in a harmonica band. Big boys with changing voices, timid girls, retarded children—these show an especially active interest in harmonica group work. And through the strong fascination of this novel type of training, they unconsciously develop concentration, perseverance and preciseness.

### Interesting Experience of **New York Principal**

It is interesting to note what Edward R. Maguire, Principal of Junior High School No. 61, New York City, says in respect to the part which harmonica group work plays in the building of character:



LBERT G. COWGILL, Superintendent of School Department, The Pennsylvania Institution for the Instruction of the Blind, Overbrook, Philadelphia, Pa., says: "Our boys and girls are 'just like' all other thousands in Philadelphia coming under the

hypnotic influence of the harmonica; they 'just love it!' When fifty boys and fifty girls come voluntarily for practice and rehearsal during their free time, it means a new kind of interest has been awakened. Every boy and girl is a lot smarter than they or we think they are; if we can stimulate their interest in music by the harmonica, opportunity for wider and bigger things will surely present itself. Our "Harmonica Band" has only one objection to the program: the rehearsals don't come often enough!"



As a socializing factor the harmonica ranks high. I have had experience with the so-called bad boy.' His interest once awakened and encouraged by his success with the instrument, I have through this additional hold upon him, a leverage with which to work. Many a fellow has been caused in this way." has been saved in this way.'

Miss Nellie C. Hudd, Principal of the Stewart School of Chicago, adds: "In our school where the development of character is the big purpose underlying all we do—the harmonica is 'par excellence' in furnishing the motive for splendid team work and mutual helpfulness."

### Harmonica Instruction Simple **Progress Rapid**

Teachers and music supervisors have found the instruction of harmonica simple and results most gratifying. With the aid of illustrated instruction books, four-part harmony charts for teachers, and individual "part" cards for the children, progress is astonishingly rapid. (To teachers, and others in authority this material will be sent without charge upon request.) With a few minutes' practice, the player is able to run the scale and shortly thereafter to render the simple melodies of school and old favorites.

In the words of Miss Ruth Townsend, Supervisor of Music in Schools of Paducah, Ky., "We hesitated about taking up harmonica work, owing to our lack of knowledge of this instrument, but found that with the aid of your free instruc-tion books and charts it was easy for the chil-dren to learn to play."

To enable teachers to study the results of harmonica group work in many schools, under varying conditions, a thorough treatment of the subject has been prepared in the form of a brochure entitled "The Harmonica as an Important Factor in the Modern Education of Girls and Boys." This brochure carries practical suggestions and holes for

cal suggestions and helps for individual as well as group instruction on the harmonica— it tells how to organize orchestras and bands—and gives directions for the suc-cessful staging of harmonica contests. Furnished upon re-



M. Hohner, Inc., Dept. 543-B,
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Education of Girls and Boys" ....Free instruction material.









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#### In the Gymnasium

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#### On the Athletic Field

Skating, hockey and other winter sports are not curtailed by early darkness when Bel-Sun-Lites flood the field with brightness. Very few of them are needed to bring daylight and usefulness to a dark deserted rink

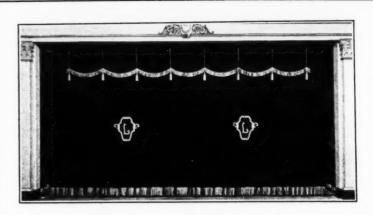
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other to the problem of securing better attention and interest on the part of pupils, etc.

4. He will send copies of his observation sheets to teachers in advance of his observations and conferences.

5. He will spend considerable time in observing teachers at work.

6. He will hold conferences with teachers for discussion of the points observed.

7. He will give demonstration lessons or provide opportunity for the giving of demonstrations by the stronger teachers of the force. It will not be assumed that the demonstration lessons are perfect in all respects or that they are superior to the work of the observing teachers. Their use will be to demonstrate particular points of method, technique, and the like.

8. He will provide opportunities for teachers to visit other teachers at their work.

9. He will plan teachers' meetings where teachers will be encouraged to freely discuss their aims, methods, techniques, selection and organization of subject matter, disciplinary problems, and the like.

10. He will, with the cooperation of teachers, continually revise the course of study to make it more effective.

11. He will utilize the results of intelligence and educational tests for better classification for the purpose of improving instruction.

Results to be Expected With this or a similar supervisory technique the principal will be able to accomplish results in the improvement of teaching in his school. With such a program he will be ready to meet the continual change in personnel of his teachers and to assume the responsibility for the work accomplished in his school. With such a program he will be able to establish a unity of purpose and effort throughout his school. With such a program he will be able to more accurately rate his teachers. Unless he has done everything in his power to improve her work, a principal has no right to recommend the dismissal of a teacher for inefficiency.

Supervision as outlined means helpful leadership, constructive suggestions, and active help. It implies the visitation of classes, diagnosis of the methods and techniques employed by the teacher, and the effecting of sound remedial measures. It implies expert help in the whole field of classroom management to needs clearly recognized by the teacher.

Supervision of the kind described demands a principal qualified by nature and professional training for the work. It can be effective only if the principal has a sympathetic and cooperative attitude. Supervision by a cold, egotistical, domineering principal will always fail. The principal must be inspirational and kindly. Teachers should always leave a conference inspired with a feeling of the importance of their work and encouraged to attempt its improvement.

### NEW SINGLE-SALARY SCHEDULE AT MANITOWOC, WIS.

(Continued from Page 45)

begin at a minimum of \$1,400, advancing at the rate of \$100 for the next two years, and \$50 for the succeeding eight years, up to a maximum of \$2,000.

Teachers in group A, holders of a master's degree, begin at a minimum of \$1,500, advancing at the rate of \$100 for the next three years, and \$50 for the succeeding seven years, up to a maximum of \$2,150.

The schedule provides that it shall be the policy to appoint teachers with experience, unless they have received a rating of superior in the institution where they received their training. Local applicants must have at least one year of successful experience in another school system of good standards before being appointed

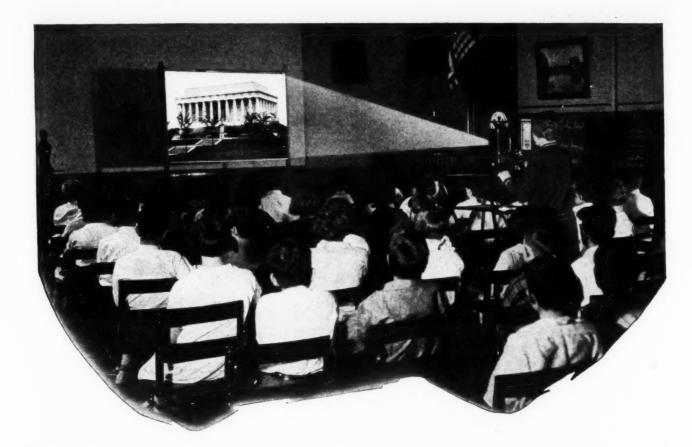
on the teaching staff. Outside experience of teachers will be evaluated by the superintendent and given credit according to the type of school in which the experience was obtained.

Teachers in the employ of the board of education will be advanced only one step in case they are more than one step below the schedule, unless a special recommendation of the superintendent provides otherwise. Special teachers, supervisors, heads of departments with three or more teachers, and principals will have their salaries adjusted individually. Advancements in the schedule will not be possible, unless the qualifications of the teacher meet with the requirements. That is, teachers must have taken courses during the past two years, which the superintendent approves as applying to the field in which they are assigned.

In order to receive the salary advancements in the schedule, teachers must receive a rating of B. After reaching the maximum, a teacher must obtain a rating of B to be reappointed. Teachers receiving a rating of C may be retained for one year on probation upon the recommendation of the superintendent. A teacher who receives a rating below C may not be reelected.

In order to stimulate professional growth in the service, it is provided that teachers, supervisors, and principals shall attend summer school, or do an equivalent amount of advanced work once in four years, to receive reappointment. The school attended and the courses taken must be approved by the superintendent. To receive credit, the summer session must be attended for five weeks and passing grades must be certified by the institution in which the work was taken. Professional credits which have been applied toward the removal of a professional handicap are not applied toward the requirements for salary advances.

(Concluded on Page 142)



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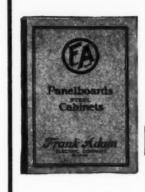
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Safety Type in Schools

(Concluded from Page 140)

All employees are allowed seven days of absence annually on full pay, for sickness in person, quarantine, or for death in the immediate family. The sick leaves are cumulative, and if not used in any year, will accrue to the credit of the teacher for a more extended period of illness at some future time. In case the benefit is not used over a period of four years, the teacher will be granted the unused time, for an extra vacation on pay, or she may be paid the amount due in unused sick benefit as a bonus at the close of the four-year period of service. Teachers serving for a period of less than one year will be entitled to sick leave in proportion to the length of the service.

### THE SCHOOL BOARD AND THE SUPERINTENDENT (Concluded from Page 47)

11. Appraise the efficiency of the schools and their officers in terms of their value to the com-

### IV. Duties and Powers of Officers and

Superintendent

The President of the Board of Education

Preside at all meetings of the board.

2. Appoint special committees unless otherwise specifically provided by passage of motion at the

board meeting.

3. Vote on all matters he may desire.

4. Sign all necessary legal instruments, including minutes of board meetings and contracts.

Call special meetings of the board, when necessary.

B. The Secretary of the Board of Education
1. Be responsible for making and keeping an accurate record of the minutes of the board.

Make out required reports.
 Call special meetings of the board, when

4. Sign all necessary legal instruments, warrants, contracts, including minutes of the board meetings, and O.K. the monthly bills which have been approved by the superintendent of schools.

C. The Superintendent of Schools

1. The superintendent shall be the chief executive officer of the board with authority to man-

age and direct the affairs of the schools, under the policies and regulations established by the board of education. He shall also be responsible for the administration and enforcement of all adopted policies and regulations relating to the operation of the schools.

2. He shall furnish creative leadership to the

professional employees and to the school board.

3. With the counsel and cooperation of his faculty he shall prepare, adopt, and amend, if needed. the program of studies, curricula, and

needed, the program of studies, curricula, and courses of study.

4. He shall nominate all employees of the board for election, shall determine and assign their powers and responsibilities, and supervise and direct them in the performance of the same. He, shall select and employ all substitute and emergency teachers, pending a regular board meeting.

5. He shall prepare a financial budget for submission to the board and for approval, amendment, and final adoption.

and final adoption.

6. He shall act as purchasing agent for the board, purchasing all supplies, materials, and services authorized by the annual budget in accordance with state law.
7. He shall control and direct the classifica-

8. He shall prepare for the secretary of the board the minutes of school board meetings and shall keep the minute-book in the steel vault in his office. He shall also keep such other records and accounts as may be necessary, or required by the heard the board.

9. He shall be responsible for the safety, proper care, and use of all school property, so far as means at his disposal will permit.

10. He shall prepare and submit to the board for its approval statements of policy, programs, etc., requiring action of the board, which he believes are model for the proper continuous.

ete., requiring action of the board, which he believes are needed for the proper control and management of the schools.

11. He shall assist the board in reaching sound judgments, establishing policies, and shall place before the board, when needed, helpful facts, results of investigations, information, reports, and sive personal advice on technical matters when give personal advice on technical matters when such is needed.

He shall attend all board meetings.

### V. Order of Business

1. Call to order.

- Approval of minutes.
- Bills and accounts.
- Reports of the special committees.
- Unfinished business.
- New business.
- 7. Adjournment.

#### VI. Amendments

These rules may be altered or amended at any regular meeting by a majority vote of the whole board, provided that notice of the proposed action shall have been given at the last regular meeting and made a part of the minutes of said meeting, or provided a written notice of proposed changes is mailed to each board member, through the superintendent's office at least even day before superintendent's office, at least seven days before said meeting.

#### STANDARDS FOR SCHOOL-TRANSPORTA-TION VEHICLES AND DRIVERS

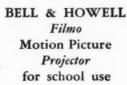
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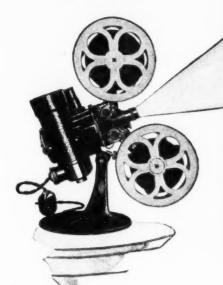
the superintendent of schools. Cases of misconduct on the part of any pupil or pupils must be reported at once to the principal of the building which the child or children attend.

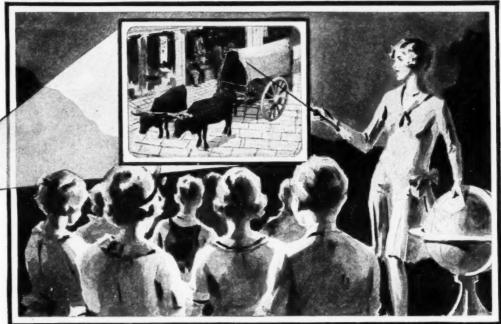
- 3. All school transportation vehicles must be brought to a complete stop before crossing any railroad crossings, in accordance with state law.
- 4. Bus drivers must follow a regular schedule as nearly as possible and report to the school building or bus terminal not more than 30 minutes, nor less than 15 minutes, before the opening of school.
- 5. Pupils shall not be permitted to transfer from one bus to another without permission from the superintendent of schools or the principal of the school which the children attend.
- 6. There shall be no smoking on the bus by either driver or pupils while children are being transported to and from school.

#### Miscellaneous Duties

1. Each bus driver may be called upon to carry light supplies or the regular supply chest between schools on his bus route and the central office.







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### LITTLE BUT IMPORTANT THINGS OFTEN FORGOTTEN IN SCHOOLHOUSE PLANNING

(Concluded from Page 54)

it is well to place three or four. A necessity frequently overlooked is the arrangement for paper towels and receptacles for receiving the soiled towels.

Hose bibbs should be placed about 100 ft. apart.

More often than otherwise, the flagpole and its setting are overlooked. If it is kept in mind during the preparation of the landscape treatment of the grounds, then it is likely that it will be appropriate. The size of the flag and the proper architectural treatment of the base of the flagpole, and the treatment of the ground about it deserve attention for flag-day cere-

Landscape work is generally left to the last, whereas, as a matter of fact, it should be a part of the preliminary sketches. Very often an early development of the landscape scheme will disclose a finer location for the building, and the adequacy of the playground, lawns, shrubs, etc., will receive more consideration.

Before closing, I wish to impress you with the influence of good architecture upon our people and our children. Not only has good architecture a great influence upon the lives of those who view it, but it has a tremendous influence upon the efficiency and development of the occupants of the school buildings so blessed, as well as contributing to peace of mind. No one can live within and see daily the beauties and refinements of good architecture without experiencing an intellectual and emotional uplift, which for the time at least, make him or her a better man and citizen. A building possessing good architecture, without the necessary appointments to comfort, health, safety, can-

not fulfill its mission. The same is true of a building which has comfort, safety, and conveniences but which does not possess the attributes of good architecture. In this day when so much valuable information and so many able men are available, there should be no reason why our school buildings should not continue to excel in educational and architectural values to their occupants, and to the people of our times and those who are to follow.

### THE NEW HIGH SCHOOL AT

PAINTED POST, N. Y.
(Concluded from Page 60)
The plumbing system is of the most modern design, including brass pipe throughout, flush valves, and porcelain fixtures. Acid-resisting pipe is used in the laboratories.

The new buildings are of fire-resisting construction with concrete foundations and reinforced concrete floors throughout. The walls above grade are of brick and tile. The face brick is of the Harvard type, so often used in The window sills, early colonial buildings. portico floor, and steps are of Indiana limestone. Maple floors are used in classrooms, and terrazzo floors in the lobby. The roof is built up of asphalt and felt, with copper flashings.

The interior trim is of mahogany, contrasting with buff plaster walls. The wall color is integral with the last coat of plaster, thereby eliminating the mars and scratches that show on painted walls.

The columns and trusses over the gymnasium and auditorium are of steel. Stairs are of steel and concrete. Steel lockers are provided in the gymnasium locker rooms and also in the corridor partitions where they are recessed. Drinking fountains and radiators in the corridors are also recessed.

The equipment and furnishings are of the best type obtainable from nationally known manufacturers.

A bond issue of \$250,000 was voted which covered the complete cost of the new buildings, equipment, and all incidental costs. The buildings cost 321/2 cents per cubic foot, including all mechanical equipment.

The members of the board of education who served during the construction of the building were: Otis A. Gage, Ph.D., president; Herbert L. Hollister, secretary; Fred L. Martin, D. H. Seeley, E. D. Bonham, B. L. Bradley.

The architect was Palmer Rogers, 101 Park Avenue, New York, N. Y.

It is felt that with this new school building, Painted Post has adequately solved its present problems of properly caring for its school children. Since the building was planned with an eye to possible later additions, further expansion in future generations is also well provided for. The pleasing feature of the combined auditorium and gymnasium has proved so successful that other towns in that section have been inspired to follow a similar plan in their new buildings.

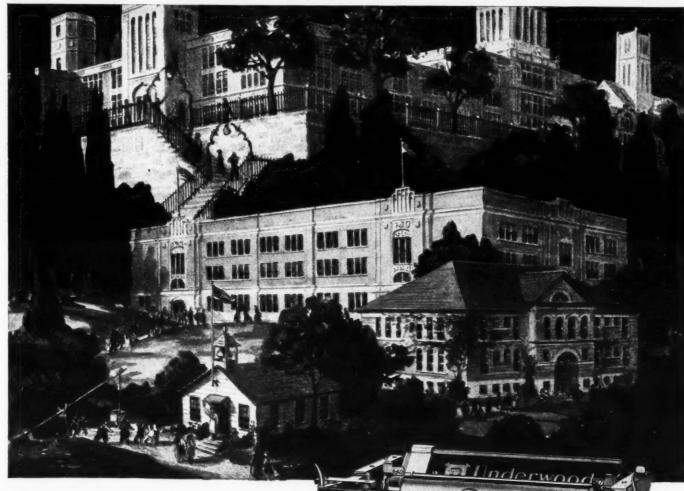
Shenandoah High School Installs Radio
Upon the suggestion of Supt. A. J. Ratchford of
Shenandoah, Pa., the local rotary club instituted
a movement to install a radio, with the necessary
amplifiers and switchboards, in the high-school
building. A series of three wires are carried to

building. A series of three wires are carried to each classroom, auditorium, and gymnasium in the high-school building. A microphone attachment is located in the office of the superintendent and the high-school principal.

Teachers will be furnished with copies of the educational programs and during certain hours of the day they may, by pressing a button, tune in on subjects appropriate to the classwork.

DR. WHIPPLE JOINS D. C. HEATH COMPANY Dr. Guy Montrose Whipple of Danvers, Mass., has joined the editorial staff of D. C. Heath & Company, Boston, as editor of books for the graded and junior high schools. Dr. Whipple, who has been connected with a number of schools in the east and middle west, has been editor of the year-books of the National Society for the Study of Education and the educational problem series.

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The Public School Museum of St. Louis, the school systems of San Diego, Calif., Detroit and Seattle, and the Field Museum in Chicago are recent additions to those using these scholarly aids to visual instruction.

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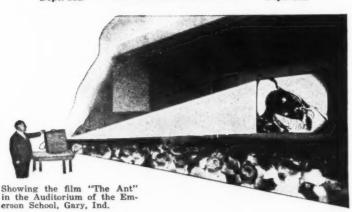
### "Is Civilization Moving West?"

This is the title of an interesting new booklet by President DeVry. Important statistics on the proven value of visual instruction methods, and the cost of "repeaters" in schools make this booklet of exceptional interest to every teacher. Sent free to teachers who request it on their school stationery.

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### The Valleyco Certificate

Genuine Valleyco Certificate Blackboards, when properly in-stalled, are certified by the manu-facturers not to warp, buckle or shrink; that the writing surface will not crack, chip or peel; that they will resist dampness and that they will not become discolored but will remain a uniform blue black will remain a uniform blue black

It is further certified that Genuine Valleyco Certificate Blackboards will provide a permanent writing surface, successfully accepting all crayons with the exception of talc, and that they will be easy to read from, and when properly treated, will not gloss.

In addition "CINOPLATE" is certified to be water-proof and can be attached to any wall regardless of atmospheric conditions.

### A New Idea in Blackboards

### Will be introduced to Schoolmen at Cleveland

A blackboard 3/16 of an inch thick—which weighs only one pound per square foot crated, and yet which possesses every qualification of the finest, higher-priced composition blackboards—That's "CINOPLATE," the Featherweight blackboard.

"CINOPLATE" is a Valleyco Certificate Blackboard with a foundation that is new and unique. This foundation is of pure wood torn apart and united again under tremendous pressure without chemicals, the only binder being the wood's own juice. It is 100% pure wood without grain.

### The Valleyco Company, Inc.

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### CINOBOARD

The foundation of "CINOBOARD" is especially selected long wood fibres combined into a pulp and then laminated into a grainless board that will lie flat and last indefinitely with proper care. Each panel is water-proofed and other-wise especially treated.

### Exceptional Writing Surface

The writing surface of all Valleyco Boards is of an exceptionally smooth, velvet nature. Its color is uniform black throughout. It will take any form of chalk with the exception of talc, readily making a clean, clear mark which can be easily erased. This surface is guaranteed not to crack, blister or peel.

### Visit our Cleveland Exhibit

BOOTH

#### THE BELOIT VOCATIONAL SCHOOL

(Concluded from Page 61)

general contract for the building amounted to \$111,000; for heating and ventilating, \$20,785; for plumbing, \$9,327; and for electrical work, \$4,435. The construction details of the building are as follows:

#### Construction Data

Construction Data
Date         blds         received.         Aug. 22.         1927           Date         contract awarded.         Aug. 22.         1927           Date         construction started.         Aug. 23.         1927           Date         construction completed.         July 15.         1928           Date         building         occupied.         Aug. 1,         1928           Working         days         required.         250
Building
Number of rooms.         40           Classrooms         4           Commercial department.         4           Number of laboratory rooms.         5           Library reading room.         1           Offices.         1           Book storage         1           Nurse, bedroom, and model flat         3           Teachers'         1           Auditorium: Size.         40 by 60           Seating capacity         300           Gymnasium: Size.         (same as above)
Design and Construction Materials
Exterior facing
Cost and Pupil Capacity

The building was designed and erected under the supervision of Messrs. Merman and Skogstad, Architects of La Crosse, Wisconsin. Mr. A. G. McCreary, director of the Vocational School, worked out the original educational requirements for the building.

### THE ACTUAL CLERICAL WORK IN HIGH SCHOOLS

(Concluded from Page 55)

Handling textbooks and supplies.

a) Ordering, inventory, and numbering.
b) Distributing to teachers and collecting from c) Distributing to students entering late.

Distributing to summer-school pupils and collecting money.

e) General care of supplies and books in office and stockroom (constant).

Student Clerical Assistance-Student clerical assistance is used in some schools quite effectively, and in other schools it is completely taboo. Mimeograph squads in several schools have proved effective agencies for relieving both the clerical and teaching staff of a great deal of clerical duty. In some schools the commercial department furnishes secretaries to the heads of departments, that do good work. In other schools this is unsatisfactory. The danger is generally that this kind of service is likely to be exploited, and it cannot be relied on generally for the clerical work of the school, though under proper supervision it may be helpful.

Poor Conditions for Clerical Work-Another essential series of facts relates to the clerical force and to the conditions under which it does its work. On the latter point first, it may be noted that the physical conditions under which clerical work is done is a serious factor in its efficiency and in its morale. It was particularly noteworthy that in old buildings all clerical work was done in an allotted space not specially designed and frequently too small for clerical No adequate provision was made for records both as to amount of space and filing facilities, and no adequate provision was made for mimeographing. The extent and importance of clerical work in high-school administration has not been taken into account in the planning of old buildings, and the mounting registration further complicates a bad situation.

Length of "Clerical Year"-There was found a condition especially agreeable to the clerical force but not in the best interest of the school



WOODWORKING SHOP, BELOIT VOCATIONAL SCHOOL, BELOIT, WIS.

Merman and Skogstad, Architects, La Crosse. Wis.

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#### Library Paste

S the best paste for the office of the school. It sticks instantly and holds. It remains soft and moist in the package indefinitely. Never stains.





AVERY excellent manent and most satisfactory for composition book 1150

system or of adequate return on the taxpayer's money; that was the conception of the length of the school year in terms of the "teacher's year," instead of in the usual terms of clerical service, even though clerks voluntarily remained in some instances a week or two after teachers ordinarily began their vacations. Clerks worked only on school days. They were required to be present, as were laboratory and librarian assistants "eight hours a day, including the lunch period of one hour." Obviously, the time service of clerks should not be determined by the time service in school of teachers. There is no good reason why clerks in schools should not be held to the same standards as clerks outside, namely, a six-day week, an eight- or a seven-hour day for five days, and a four-hour day Saturday, a twelve-month year with two to four weeks' vacation, with perhaps an additional allowance at Christmas and Easter.

### PRESIDENT BOYNTON INVITES SCHOOL WORLD (Concluded from Page 56)

(Concluded from Page 56)

Group 6, Articulating school with life, Mr. Paul C. Stetson, Dayton, Ohio, chairman.
Group 7, Articulation problems in the field of adult education, Mr. C. R. Reed, Bridgeport, Conn., chairman.
Administration and Organization in the Smaller Communities, Mr. W. C. Smith, Albany, N. Y.
Administration and Organization in Larger Communities, Mr. William J. Bogan, Chicago, Ill.
Group 8, A guidance program as a means of articulation of units in education, Mr. John H. Bosshart, South Orange, N. J., chairman.
The Effect of Guidance Upon Articulation from Unit to Unit, Mr. R. D. Allen, assistant superintendent of schools, Providence, R. I.
The Effect of Guidance Upon the Articulation of the Organization, Mr. W. E. Givens, superintendent of schools, Oakland, Calif.
The Effect of Guidance Upon Teacher Training for Better Articulation, Mr. C. D. Cooper, principal of the State Normal School, Brockport, N. Y.
Better Articulation Through Guidance and Its Effect Upon Morale and Scholarship, Miss Elizabeth E. Packer, acting principal of the New Trier Township High School, Winnetka, Ill.
Group 9, Articulation of teacher-training agencies with the other units of American education, John W. Withers, New York City, chairman.
Summary of the report of the committee on articulation of teacher-training agencies Within Articulation of Teacher-Training Agencies Within

the State, Ned H. Dearborn, state education department, Albany, N. Y.

The University School of Education in Relation to Other Teacher-Training Agencies Within the State, Dr. D. C. Phillips, University of Missouri, Columbia.

Arts Colleges as Teacher-Training Agencies, Mr. R. H. Jordan, Cornell University, Ithaca, N. Y.

Articulation of State Agencies for Teacher-Training Within the Field Staffs of Their Service Areas—From the Standpoint of the Superintendent, Mr. T. W. Gosling, superintendent of schools, Akron, Ohio.

Articulation of State Agencies—From the Standpoint of the President and Faculty of the Teacher-Training Agency, Mr. Charles Foster, State Teachers' College, Indiana, Pa.

Tuesday Evening, February 26

Joint meeting with the American Educational Research Association.

Functional Administration and Research, Mr. M. R. Keyworth, superintendent of schools, Hamtramck, Mich. Function and Value of Public-School Research Departments, Dr. W. W. Theisen, assistant superintendent of schools, Milwaukee, Wis.

The Research Function of State Education Departments, Dr. J. Cayce Morrison, assistant commissioner of elementary education, state education department, Albany, N. Y.

University Research and Its Value to Public-School Administration, Dr. M. R. Trabue, professor of education, University of North Carolina, Chapel Hill, N. C.

Wednesday Morning, February 27
What a Superintendent Has a Right to Expect of Institution Training Teachers for the Elementary thools, Mr. E. C. Hartwell, superintendent of schools, with N. Y. What a Superintendent Has a Right to Expect of an Institution Training Teachers for the Elementary Schools, Mr. E. C. Hartwell, superintendent of schools, Buffalo, N. Y.

What a Superintendent Has a Right to Expect of an Institution Training Teachers for the Secondary Schools, Mr. Charles S. Meek, superintendent of schools, Toledo, Ohlo.

What a Rural School Has a Right to Expect of an Institution Training Teachers for the Rural Schools, Dr. Julian E. Butterworth, professor of education, Cornell University, Ithaca, N. Y.

What a Teacher Has a Right to Expect in Help, Guidance, and Professional Stimulus from the School Engaging Her Services, Dr. Frank P. Graves, state commissioner of education, Albany, N. Y.

Wednesday Afternoon, February 27

Group 1, County superintendents, J. W. Sweeney,

Group 1, County superintendents, J. W. Sweeney, chairman.

The Improvement of Teachers, Mr. N. Searle Light, director of the division of rural education, state education department, Hartford, Conn.

Training Teachers in Service, Miss Kate V. Wofford, superintendent of the Laurens county schools, Laurens, S. C.

Summary of discussions by Mr. A. E. Winship, editor of the Journal of Education, Boston, Mass.

Group 2, Cities of less than 10,000 population, Mr. L. H. Bugbee, chairman.

The speakers include Mr. E. W. Ireland, Stratford, Conn.; Mr. L. P. Hollis, Greenville, S. C.; Mr. J. P. Vaughan, Chisholm, Minn.; Mr. C. R. Coblentz, Eaton, Ohio; Mr. E. C. MacInnis, Jefferson, Wis.; Mr. I. H. Hart, Cedar Rapids, Iowa.

Group 3, Cities of over 10,000 and less than 50,000 population, Mr. Wilbur H. Lynch, Amsterdam, N. Y., chairman.

Salaries in Teacher-Training Institutions, Are They Sufficient to Secure the Best Service? Mr. Roy P. Wisehart, state superintendent of public instruction, Indianapolis, Ind.

To What Extent are Employers Responsible for the Success or Failure of the Young Teacher? Mr. John B. Heffelinger, superintendent of schools, Newton, Kans. Selective Teacher Training, Mr. Sheldon E. Davis, president of the State Normal College, Dillon, Mont. Group 4, Cities of over 50,000 and less than 100,000 population, Mr. L. W. Mayberry, Wichita, Kans., chairman.

Better Training for Entrance, Mr. David E. Weglein, Baltimore, Md.

Training After Entrance, Mr. A. H. Hughey, El Paso, Tex.

Training After Entrance, Mr. A. H. Hughey, El Paso, Tex.

Rewards for Training, Mr. Clyde B. Moore, Cornell University, Ithaca, N. Y.

Will Training and Rewards Develop a Professiont Mr. Harry DeW. DeGroat, Cortland, N. Y.

Group 5, Cities over 100,000 and less than 200,000 population, Mr. George N. Child, Salt Lake City, Utah, chairman.

Requisite Ouglifications of the Regioning Teacher and

Mr. Harry DeW. DeGroat, Cortland, N. Y.
Group 5, Cities over 100,000 and less than 200,000 population, Mr. George N. Child, Salt Lake City, Utah, chairman.
Requisite Qualifications of the Beginning Teacher and How to Secure Them, Mr. G. W. Frasier, Greeley, Colo. The Active Teacher a Constant Student—What, When, and Where, Mr. P. P. Claxton, Tulsa, Okla.
The Place, Kind, and Amount of Supervision Requisite for Improved Teaching Service, Mr. E. W. Butterfield, Concord, N. H.
The Relationship Between Salary Schedules and Teacher Service, Mr. E. S. Evenden, New York City.
Group 6, Cities of over 200,000 population, Mr. Frank Cody, Detroit, Mich., chairman.
What Counts in the Selection of Teachers? Ml. R. L. Jones, Memphis, Tenn.
How Long Should Be the Basal Training for a Teacher? Mr. M. C. Potter, Milwaukee, Wis.
What Training Should be Given While in Service? Mr. C. W. Washburne, Winnetka, Ill.
How Stimulate Continuation of Training While in Service? Mr. Fred M. Hunter, Denver, Colo.
Thursday Morning, February 28
The Scientific Investigation of Problems of Character Education, Mr. William F. Russell, Teachers' College, Columbia University, New York.

Thursday Afternoon, February 28
Introduction of the new U. S. Commissioner of Education.
Introduction of the new U. S. Commissioner of Education.
Introduction of Superintendence.
Address, Mr. Paul V. McNutt, dean of the law school, University of Indiana.
Group S, Training for administration, Z. E. Scott, Springfield, Mass., chairman.
The Responsibility Which a Profession and the Department of Superintendence Must Assume for Establishing Standards for Its Members, Mr. Fred Engelhardt, Minneapolis, Minn.
Current Practices in Selecting School-Administrative Officers Rhould Be Legally Standardized in States and the United States, Mr. Augustus O. Thomas, Augusta, Me.
Proessional Training of School-Administrative Officers, Mr. Thomas W. Gosling, Akron, Ohlo.



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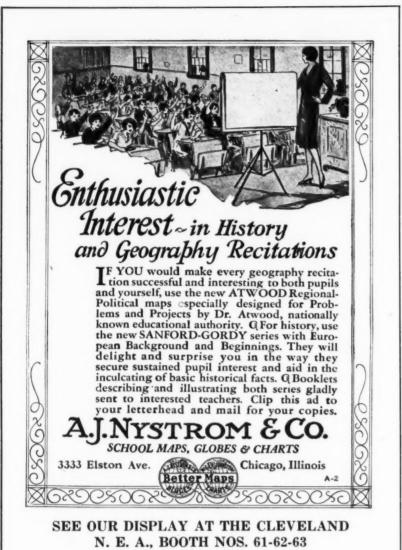
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### THE HIGH-SCHOOL BUILDING AT NEW ALBANY, IND.

(Concluded from Page 63) injury to tools. The metal shop and the printshop have concrete floors. Walls and ceilings are plastered, and terrazzo and brick have been used in special rooms for wainscoting.

The furniture throughout the building was designed by the architect, and the layouts for each of the rooms were made by the architect in consultation with the department heads and the executives of the school. The classrooms have in part movable chair desks and in part tablet-arm chairs of the pedestal type. commercial rooms have special double tables with individual drawers. The tables in the physics and chemistry laboratories have been especially designed to economize space. The cafeteria tables have washable deal tops. The furniture in the domestic-science department is arranged on the basis of home-unit groups for work and study.

The building was erected in ten months' time at a cost of \$360,000, or 161/2 cents per cubic foot. This low cost is remarkable when it is considered that the structure is fireproof throughout with the exception of the roof, which is of steel and wood. The complete furniture, including machinery and everything ready for the pupils, was purchased at a cost of \$70,000, making the total cost of the plant, except the site, \$430,000.

The building will seat 720 pupils and has been planned for a normal maximum load of 900.

The architect, Mr. W. C. Findt, has specialized in schoolhouse planning and construction and has had broad experience in erecting successful schools.

INDEX OF SCHOOL-BOND PRICES
(Concluded from Page 68)
Sometimes the trouble is with the interest rate; sometimes with the conditions on the bonds.

School boards should see to it that both are right before they try to sell bonds.

Table II shows that the total of all municipal bonds sold during 1928 was close to \$1,400,-000,000, that is about \$100,000,000 less than the amount sold in 1927.

Table IV shows a decrease in the net interest yield of long-term Government bonds in November and a slight rise in December and January.

#### TABLE V Security Prices and Yields<sup>6</sup>

Date	Average Price of 393 Stocks		Average Yie on 60 High Grade Bond
(1926	Average=10	0) .	
1929			
Jan	178.97	97.67	4.577
1928			
Dec	171.87	$97.3^{7}$	$4.59^{\circ}$
Nov	171.1	97.8	4.55
Oct		97.5	4.57
Sept	156.6	97.5	4.57
Aug		97.2	4.59
July		98.2	4.54
June		98.5	4.50
May	152.1	99.7	4.42
April		100.3	4.38
March	137.9	100.5	4.37
Feb		100.3	4.38

<sup>6</sup>As reported by Standard Statistics Company, Inc. Used by special permission. <sup>7</sup>Not final.

As Table V shows, the price of stocks reached a new all-time high in December and January. There was a slight decrease in the price of

Table VI shows that the price of all commodities decreased slightly in December and January, while the price of building material continued to rise.

#### TABLE VI

#### Revised Index Number of Wholesale Prices8

All Commodities   Materials   1929		Past	Twelve	Months				
Past Six Years   All Com-		Month						
Dec.         96.4°         96.2°         1927         95.4         93.3           Nov.         96.7         96.0         1926         100.0         100.0           Oct.         97.8         95.0         1925         103.5         101.7           Sept.         100.1         94.7         1924         98.1         102.3           Aug.         98.9         94.6         1923         100.6         108.7           July         98.3         94.4           June         97.6         93.9           May         98.6         93.5           April         97.4         92.5           March         96.0         91.0           91.0         91.0         91.0           100.         100.         Statistics,           1926—         190.         100.		Jan.	96.59			All Com-	Building	
Oct. 97.8 95.0 1925 103.5 101.7 Sept. 100.1 94.7 1924 98.1 102.3 Aug. 98.9 94.6 1923 100.6 108.7 July 98.3 94.4 June 97.6 93.9 May 98.6 93.5 April 97.4 92.5 March 96.0 91.0 of Labor Statistics, 1926— Tel. 100.4 100.100.100.100.		Dec.	$96.4^{\circ}$	96.20				
Sept. 100.1     94.7     1924     98.1     102.3       Aug. 98.9     94.6     1923     100.6     108.7       July 98.3     94.4       June 97.6     93.9       May 98.6     93.5       April 97.4     92.5     *United States Bureau of Labor Statistics, 1926—       Feb. 98.4     91.0     100.       100.     100.     100.		Nov.	96.7	96.0	1926	100.0	100.0	
Aug. 98.9 94.6 1923 100.6 108.7  July 98.3 94.4  June 97.6 93.9  May 98.6 93.5  April 97.4 92.5 *United States Bureau of Labor Statistics, 1926—  Tel. 98.4 1923 100.6 108.7  *United States Bureau of Labor Statistics, 1926—  100. 100.		Oct.	97.8	95.0	1925	103.5	101.7	
Aug.     98.9     94.6     1923     100.6     108.7       July     98.3     94.4       June     97.6     93.9       May     98.6     93.5       April     97.4     92.5       March     96.0     91.0       States     Bureau       100.     100.       100.     100.       100.     100.		Sept.	100.1	94.7	1924	98.1	102.3	
June     97.6     93.9       May     98.6     93.5       April     97.4     92.5       March     96.0     91.0       States     91.0       States     100.       100.     100.       100.     100.			98.9	94.6	1923	100.6	108.7	
May 98.6 93.5  April 97.4 92.5  March 96.0 91.0 of Labor Statistics, 1926—  100. 100.		July	98.3	94.4				
April 97.4   92.5   *United States Bureau   March 96.0   91.0   of Labor Statistics, 1926—100.		June	97.6	93.9				
March 96.0 91.0 of Labor Statistics, 1926-		May	98.6	93.5				
Feb 00.4 01.0 100.	٠	April	97.4	92.5				
		March	96.0	91.0		bor Statis	stics, 1926-	-
		Feb.	96.4	91.0		ot final.		

#### IMPORTANT SCHOOL-BOND SALES During the Month of December

During the Month of December	
Illinois-Adams Co., School District No.	
172\$	300,000
Illinois-Riverside, School District	250,000
Indiana-Indianapolis, School District	700,000
Kentucky-Covington, School District	250,000
New Jersey-Belleville, School District	418,000
New Jersey-Camden Co., Vocational School.	1,012,000
New Jersey-Morristown, School District	383,000
New Jersey-Palisades Park, School District.	352,000
New Jersey-Rahway, School	277,000
New Jersey-West Orange, School District	251,000
New York-Eastchester, Union Free School	, , , , ,
District No. 3	800,000
New York-Granville, Union Free School Dis-	
trict No. 7	307,000
New York-New Rochelle, School	667,000
New York-New York, School	500,000
New York-North Hempstead, Common	
School District No. 9	283,000
Yew York-Rochester, School Construction	1,075,000
New York-Rochester, School Revenue	450,000
New York-Smithtown, Rural School District	
No. 5	250,000
Ohio-Cincinnati, School District	690,000
Ohio-Newark, School District	630,000
Pennsylvania-Abington Twp., School Dis-	030,000
trict	375,000
Pennsylvania-Altoona, School District	1,000,000
Texas-Austin, School	300,000
Texas-Houston, Independent School District	1,995,000

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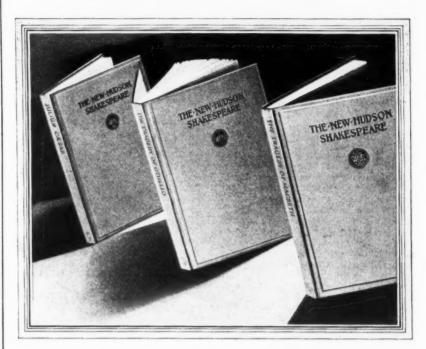
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## Book News and Reviews

#### The Problem Child at Home

By Mary Buell Sayles. Cloth, 342 pages. Price, \$1.50 The Commonwealth Fund, Division of Publications, New York.

st.50 The Commonwealth Fund, Division of Publications, New York.

This is a very valuable and welcome addition to the publications relating to child-guidance clinics that are published under the auspices of the Commonwealth Fund. Of the principal educational agencies at work on the American scene—church, school and home—the one excerting the greatest influence on the typical American child for good or ill is undoubtedly the home. Many of the problems in delinquency are due to maladjustments in the family circle. The present volume presents a wealth of actual cases, the experiences for the most part of fathers, mothers, and children who came to the child-guidance clinics conducted, during a five-year period, under the Commonwealth-Fund Program for the Prevention of Delinquency.

Part One treats of the emotional satisfactions which parents and children seek in one another, for example, normal parental love, exaggerated parental love, favoritisms, antagonisms, and jealousies. Part

love, favoritisms, antagonisms, and jealousies. Part Two deals with mistaken ideas which influence parent-child relationships, such as, wrong ideas parent-child relationships, such as, wrong ideas regarding sex development and sex practices, regarding obligations toward parents and discipline, and mistaken ideas about heredity. In these two parts the author discusses the most typical and the most frequently recurring problems in parent-child relations. Attention is here focussed on the family situation, with no attempt to trace the treatment accorded or its effect.

accorded or its effect.

Part Three presents twelve narratives in which the story is carried through the treatment period. It is only in actual case histories such as these that the grim tragedy lurking back of innocent happy childhood comes home to one. And the worse tragedy is that so much of this unhappiness could have been prevented in many cases by sane advice and a grain of common sense. Not that the author insists that a causal relation necessarily exists between the parent's behavior and the child's behavior. Nevertheless, sufficient data are given to warrant the inference that such a causal relation is usually present.

present.

The author is to be congratulated on a sane and child guidance literature. All solid contribution to child-guidance literature. All who are interested in children, or whose business it is to train children, teachers, principals, nurses, clergymen, and parents, most emphatically, parents, should read, ponder, and digest the contents of this book.

School Activities and Equipment
By Rose B. Knox. Cloth, 386 pages. Price, \$2.
Published by Houghton Mifflin Co., Boston, Mass.
The subtitle, "A Guide to Materials and Equipment for Elementary Schools," announces the purpose of this remarkably useful book. The author definitely champions the cause of the modern school and sets her approval on the "activity" school procedures and the "activity" curricula. One of the difficulties teachers have encountered in putting into practice whole-heartedly such a program has been that of securing appropriate material and equipment.

Miss Knox has given teachers the result of her own experience over many years, and the experience of other teachers as well in the selection, use, and testing of many educative activities and materials. And in so doing she deserves the heart-felt gratitude of all elementary teachers. The number of successful illustrative examples that she has gathered together will enable them to select those which are adapted to their own school, or which will at least stimulate them to initiate other

activities for their own use.

The author modestly discards all claim to originality for her work. It is, she says, a compilation which attempts to select and organize some of the scattered information about school materials, supplies, and equipment, and to place this in an educational setting. Nevertheless, she has made a substantial, worth-while contribution to modern teaching technic, a contribution that will be an inestimable boon not only to teachers, but to children as well, who will profit by the use of the dren as well, who will profit by the use of the activities her book suggests. It is a pleasure to commend it to teachers; it will help to make the schoolroom a much more interesting place; it will be a genuine aid to the realization of the aims of modern education.

Classroom Organization and Control
Jesse B. Sears. Cloth, 400 pages. Price, \$2.15.
Houghton, Mifflin Company, Boston.

This is a new revised and enlarged edition of the book with the same title that appeared in 1918. During this time the science of education has been amplified considerably. This is particularly true in the field of curriculum construction, tests, and measurements, in school construction, and teacher supervision. All these receives advented treatment in supervision. All these receive adequate treatment in the present volume. A great deal of concrete illus-trative material has been added and a very excellent collection of practical problems has been appended to each chapter. The book is designed as a text for college and normal-school students, and for teachers in service. To all, the inspirational chapter on "The Teacher's Personality" is recommended.

On Writing Essays
By H. L. Paddock and S. A. Taintor. Cloth, 261
pages. Price, \$1.10. The Macmillan Co., New York

This is an excellent book that should prove valuable to the senior high-school student who is try-ing to learn to write. Incidentally it should be of profit to the instructor who is trying to teach him profit to the instructor who is trying to teach him the art of writing. An eminently teachable volume. The authors have ingeniously arranged the material to provide an excellent course in the essay. After a concise historical sketch of this literary type, Part One presents the reader with the precepts of learning the craft, charming little essays themselves, so different from the usual aridity characteristic of the ordinary writer of the torics. This is explorible like the craft of the continuous contents of the contents rhetorics. This is splendidly illustrated by examples culled from the best masters of the craft and, by way of variety, with a few sample student themes. Part Two contains an excellent collection of modern essays of various types, all of them thought-provoking and stimulating to both teacher and pupil alike.

Personality and Success in Teaching
By Webster P. Reese. Cloth, 145 pages. Published
by Richard G. Badger, Publisher, The Gorham Press, Boston.

Press, Boston.

One can hardly say that this book supplies a long-felt want in the educational world. Much of what is written in this book has been written before and written more brilliantly. Nevertheless, there is an arresting charm about the sincerity of the writer, and undoubtedly the book will prove stimulating to those two classes for whom it was intended, namely, the young, inexperienced teachers, and the teachers of limited educational training.

#### Moral Situations of Six-Year-Old Children as a Basis for Curriculum Construction

Albert Maxwell Carmichael. Paper, 104 pages. Price, \$1. Published by the University of Iowa,

Price, \$1. Published by the Children Iowa City, Ia.

The present volume is one of the University of Iowa "Studies in Education." It is an attempt to discover the moral situations which a child 6 years of age actually faces, the responses made to these situations, and the moral issues or values which characterize these responses. This problem is intimately connected with some current issues in curriculum-making. The first is that the activities curriculum-making. The first is that the activities of the school should prepare the child to live more adequately the life he is expected to live outside the school. Once this principle is accepted, there arises the further problem as to whether child life or adult life should be reflected in the curriculum.

Another problem whose solution is attempted in

Another problem whose solution is attempted in this study is one of methodology, namely, moral responses should be directly or indirectly taught. While the data, so painstakingly gathered with the assistance of parents and teachers, do not present a final and complete picture, nor do they adequately answer all the questions raised, nevertheless, they do point the way to a technic of investigation of the problem of moral education.

Two features of this study deserving of com-

mendation are the excellent bibliography and the survey of the literature in the field.

Education in a Democratic World
By Ernest DeWitt Burton. Cloth, 168 pages.
Price, \$2. The University of Chicago Press, Chicago, Illinois.

Most of the addresses in this volume were delivered by Dr. Burton during the "glorious two years" that he was President of the University of Chicago. They represent his educational creed, a creed derived for the most part from Dewey. The first paper, "Education in a Democratic World," is a trenchant, clear-cut summary of his belief in the future of America and American education. It is almost an apotheosis of American education, yet there is candid acknowledgment that a good deal of haziness and uncertainty still prevail in the American mind as to the goal of the educative process. The obvious sincerity of his religious beliefs and

of his profound conviction that religion has a place in American education are strikingly manifested in the paper on "Religion and Education." The main nurses of the college is the development of moral purpose of the college is the development of moral character; this runs like a leit-motif throughout the book. A vigorous thinker and a ripe scholar, Dr. Burton managed to communicate some of that Student habits, the business of a college, the obliga-tions of the educated, the ideals of a university, are some of the themes elaborated in this volume. Never once are they befogged in the mists of wordiness; always clear as crystal shines the thought of the man. One may not always agree with him; but one could never complain that the issues are not defined with clarity.

#### The Child-Centered School

Harold Rugg and Anne Shumaker. Cloth, 359 pages. Price, \$2.40. World Book Company, Yonkers, N. Y.

This thoroughly satisfactory appraisal of the child-centered or progressive schools is probably one of the most important educational books of 1928.

child-centered or progressive schools is probably one of the most important educational books of 1928. Not that the advocates of the new education have been mute; indeed, they have been all too vocal. But for the most part, their writing has been rhapsodical or else beclouded by vague, nebulous theory. The present volume is objective; it is an unimpassioned evaluation of the progressive school. These child-centered schools that are springing up about the country exemplify in actual practice the philosophy of the new education whose first high priest was John Dewey. A rather tragic commentary incidentally is that the theories of this high priest of Democracy should be first put into practice only in private schools, destined by circumstances, to minister not to the children of the masses, but of the classes.

But aside from this objective fact, there is no doubt that here in the progressive education a ferment is at work, the most revolutionary ferment since Rousseau. These schools are not yet fully hatched; they are too experimental to receive as yet the unqualified approval of the conservative schoolman. There is much imperfection in their technique, as the authors of this book frankly admit; there is a haphazard plainlessness about many of them; they have not yet discovered a scientific method of evaluating their results objectively. But—and the point is vehemently to insist upon—this new thing that the progressive schools are putting method of evaluating their results objectively. But—and the point is vehemently to insist upon—this new thing that the progressive schools are putting into practice today, here and in other lands, is something that the human mind has been groping about for since Pestalozzi's time. This new education will reorient educational thinking about its true center—the child.

This book so splendidly written, so charmingly illustrated brings out the philosophic and psychological bases of the new education. One of the best features of the book is the trenchant criticism of the older principles that for the most part dominate our schools. Whether the American school system with its mass education can ever be transformed

with its mass education can ever be transformed into the ideal conditions achieved by these private schools remains open to question. But no educator can afford to miss reading this volume. It will give administrators in particular food for thought.

#### Free-Hand Drawing

Book I. By Beem and Gordon. Paper, 64 ages. Price, \$0.88. Bruce Publishing Company, Milwaukee, Wis.

This book represents the second edition of successful drawing book which the authors have revised and brought up to date. In addition to several new features in the shape of added color plates on book and magazine covers, posters, and object drawing, the work has been rearranged to emphasize design and color. The problems have been completely revised to simplify the work and to arouse interest in the subject.

The course is quite complete and is intended to cover two semesters of work of the first-year drawing course in the average high school.

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Series A. Ten tests, with teachers' manual and key. Paper. The Gregg Publishing Co., New York, N. Y.

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(Continued on Page 154)

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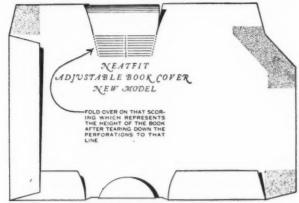
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(Continued from Page 152)
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the publishers will standardize the tests.

Algebra Work Book By J. G. Fowlkes, H. B. Kingsbury, R. R. Wallace, and T. T. Goff. Paper, quarto, 206 pages. The Macmillan Company, New

Two practical teachers of high-school alegbra, the head of the mathematics department in a teachertraining college, and a professor of education have collaborated in this book. The 100 tests may be used for diagnostic or supplementary review and drill purposes. They will materially reduce the teacher's work and aid in bringing up class standards.

Applied Arithmetic for Girls
By Nettie Stewart Davis. Cloth, 126 pages.
Price, \$0.88. Published by The Bruce Publishing

Price, \$0.88. Published by The Bruce Publishing Company, Milwaukee, Wis.

This book is a revised edition of the author's former Vocational Arithmetic for Girls, and has been prepared to fill a distinct need in the field of vocational training. The aim of the entire work has been to adapt the principles to the pupils' everyday problems, and as a result, the problems include those practical phases such as making change, figuring percentages, planning budgets, and change, figuring percentages, planning budgets, and the many other problems which arise in the woman's daily life. The problems contain ample material which is practical for beginners as well

as for advanced pupils of the trades.

The author who is qualified by long experience in the work, has realized her aim of preparing a textbook for girls embodying all of the problems they will encounter in their everyday home life, or in the trades which they may choose.

Orleans Algebra Prognosis Test
Joseph B. Orleans and Jacob S. Orleans. Paper. Price of test in packages of 25 with manual, key, and class record, \$1.40 net. The World Book Company, Yonkers, N. Y.

This test seeks to foretell the probable success of

beginners in algebra by determining their ability to use the fundamental arithmetical processes, to use symbols for quantities, and to express relationships by symbols. Some 13 basic elements of algebra are indicated in a series of lessons followed by tests. The test should prove immensely helpful.

It would be interesting to know how teachers in public high schools can legally "forbid" pupils to tudy algebra as a result of the test.

The Teaching of English
By Sidney Cox. Cloth, 178 pages.
Harper & Brothers, New York City.

Price, \$1.50.

This highly provocative book should be bought, borrowed, or stolen by every harried instructor of freshman English, as well as by all donnish persons engaged in professing upper division or graduate courses in English. They may miss out on a set of themes or their excursions into middle English, but they may possibly find their souls. I hasten to add, however, that they will not discover here a sovereign method of teaching English. Of books on ereign method of teaching English. Of books on methodology there is no end; thanks are due to Mr. Cox that he has not attempted to bring coals to Newcastle or guns to Chicago. English teaching must necessarily be highly subjective. If a man is passionately in love with the subject, I use the words advisedly, he can communicate some of that fire to the young people that sit at his feet. If he is not, no science of education, no skill with methods will ever lift him above the ranks of the gerundgrinders.

The subtitle of the book, Avowals and Ventures, aptly expresses its purpose. Here is no Aristotle pronouncing dogmatic dicta from a professional pulpit, no educational Babbitt juggling with verbal inanities. He knows his subject and he knows the American undergraduate with his superficiality and American undergraduate with his superficiality and his blase attitude toward things of the spirit. Further. Professor Cox is well aware that the undergraduate world cannot be captured by uplift jargon. The chapter on "Jarring False Bottoms" should be read and pondered by all members of the teaching fraternity in the English field from junior high to college. A quotation from that chapter will not be fraternity in the English field from junior high to college. A quotation from that chapter will not be out of place: "Associated with the spurious conception of English as a sort of varnish is the notion that, regardless of curiosity or expectation of value or aesthetic delight, a great many books 'ought to be read.' The English teacher . . . must be constantly unsettling the basis of authority . . . (and must) deter the student from uncritically accepting the teacher himself as an authority." And again in Minimum Essentials, "The virtue without which not any teaching of English can properly be called good is an inextinguishable and flaming antipathy to deception, especially self-deception." And later, "The

one thing needful is to be a real person, rather than

The book is charmingly written, a pleasant exception to most recent books on education. One of the best features of the book is the third section, "For instance where 'to confirm the preceding doctrine by example,' Professor Cox gives us a cross section, so to say, of his English classes. A vivid impression of extraordinarily vital teaching remains remains.

Education for World Citizenship

By William G. Carr. Cloth, 214 pages. Price, \$2.50. The Stanford University Press, Stanford University, Calif.
The aim of this book, as stated by the author, is

"to organize the best published thought on the edu-cational aspects of world citizenship, to demonstrate cational aspects of world citizenship, to demonstrate the value and necessity of education for international good will, and to indicate some of the ways in which schools and teachers may help the world to move toward the goal desired by all intelligent people—the attainment of world harmony and peace." Its purpose is to serve as a supplement to the ordinary textbooks used by teacher-training classes in the social studies, civic education, and moral education. The philosophy and objectives of world citizenship are clearly, if not always convinc-

moral education. The philosophy and objectives of world citizenship are clearly, if not always convincingly, set forth, together with a well-developed methodology for inculcating a sense of world-citizenship through geography, history, and literature. The main defect of the book is the tincture of pacifist propaganda running through it all. The chapter on military training is an instance in point. An attempt is made to examine objectively the case for military training in the schools. The conclusion is that military training in schools cannot be sion is that military training in schools cannot be justified as an educational agency. "In claiming to discipline the mind and to build generalized habits of soldierly virtues, military training rests its case upon a theory of transfer which is no longer accepted by educational psychologists." A glittering generalization that can be exploded by not one, but many cases, of boys trained in American military academies. No doubt, the author would take refuge in the statement that their character training is due to other subjects in the curriculum, that they display qualities of leadership, of forcefulness not because of, but in spite of their military train-Quod est absurdum will be the retort of the

(Continued on Page 157)

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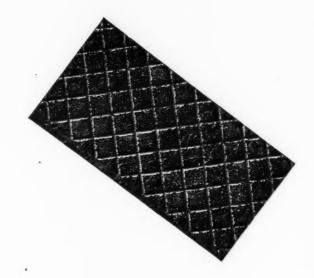
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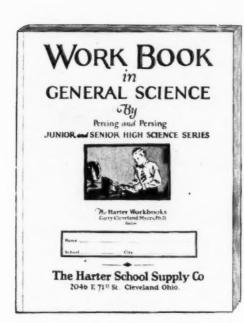
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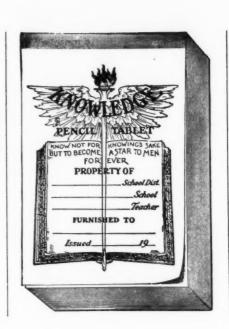


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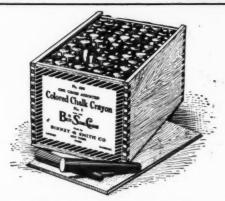
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advocates of military training. And there the case rests. There probably always will be a place for the military school and military training for a certain type of boy.

The reader cannot but admire the high idealism shown by the author of this book, cannot but hope that the attempt of this book to promote international good-feeling may soon be realized. Nevertheless, a larger question emerges. Is America quite ready for this issue? Aren't there more pressing problems at hand? Should not the American school consciously strive to promote national good-feeling before it strives for world-fellowship? The outbreak here in our own country of racial hatreds, more especially, of flaming religious antipathies would seem to indicate a greater problem that all the forces at the command of American education might well unite in a concerted effort to blot out once and for all from the land.

Latin Grammar

Latin Grammar
By Herbert Charles Elmer. Cloth, 327 pages.
The Macmillan Co., New York City.
In this book Professor Elmer definitely answers in the affirmative his own question proposed some time ago, "Is there need of another Latin grammar?" The classical investigation, partially at least, uncovered some glaring pedagogical procedures in the teaching of Latin. Syntactical rules, for example, have been stated in such a fashion and headed down from grammar to grammar that there for example, have been stated in such a tashion and handed down from grammar to grammar that there are more exceptions to the rule than cases that fit it. As every teacher knows, an extraordinary amount of unimportant details have cluttered up the Latin grammars now in use needlessly increasing the difficulties of meetering declarations and coning the difficulties of mastering declensions and conjugations. In a word, the grammarians in their jugations. In a word, the grammarians in their passion for logical presentation have undoubtedly put tremendous obstacles in the way of attainment of the modern objective of Latin study, namely, a good reading knowledge of the language.

The present volume is a move in the right direction, in the way of simplification. While it does not guarantee to teach Latin without tears, nevertheless it will focus attention on essentials by its

theless, it will focus attention on essentials by its jettison of the useless grammatical lumber that threatened to sink the ship. The book is for use in colleges and senior high schools.

Studies in Deceit

By Hugh Hartshorne and Mark A. May. Book
One, 414 pages; Book Two, 306 pages. The Macmillan Co., New York City.

This is the first of a series of studies in the Nature of Character undertaken by the Character Education Inquiry of Columbia University in cooperation with the Institute of Social and Religious Research. The present volume has been acclaimed as a noteworthy contribution to the field of character education. It is noteworthy if for no other acter education. It is noteworthy if for no other reason than the magnitude of the experimentation, together with the scientific accuracy with which the whole investigation was carried on. From the statistical standpoint, there is little to be desired. Book Two is a model of its kind for accuracy and exactness in evaluating the results of the experiment. Nor can one find fault with the technique of testing devised, although some may object from the testing devised, although some may object from the standpoint of ethics to putting young children in the way of temptation.

The purpose of this particular study was not to discover a method of improving the moral character of school children, nor was it an investigation as to why children lie and steal. This was merely a why children he and steal. This was merely a behavioristic study, an attempt to answer the ques-tion: do American school children deceive? Indeed, the authors hasten to add that, "while it is neces-sary to study deceit objectively as behavior which in morality or psychology. . . ." A cynic might wonder what sense there is in studying deceit, if it has no signficance.

Some eleven thousand children of ages 8 to 16 were tested. There were in the deception tests 22 opportunities to cheat in classroom work, 4 opportunities in athletic contest, 2 in party games, and l in schoolwork done at home. The lying tests consisted of 36 questions in one case and 10 in the other which may be answered falsely; and the stealing tests offer 2 chances to steal money and 1 to steal small articles. The authors make no claim to steal small articles. The authors make no claim to having measured deception in all its varities but only in the types of situations studied. The results have been related to the following factors: age, sex, intelligence, emotional and physical condition, socio-economic background, cultural level of the home, nationality, race, and religion, school grade, attendance, achievement, retardation, deportment, association with friends and classmates, sociability, suggestibility, movie attendance, teacher influence. suggestibility, movie attendance, teacher influence, progressive versus conventional school methods,

school and class morale, membership in clubs or organizations purporting to develop character, Sunday-school attendance, and certain efforts to teach or motivate honesty. The most significant findings were: (1) there is considerable resemblance in amount of cheating between classmates; (2) honesty is positively related to intelligence. (One might wonder if the explanation does not lie in the fact that children with a high I.Q. would have less reason to cheat.) (3) Deceit is associated with cultural and social limitations in the home background; (4) those enrolled in Protestant Sunday schools cheat less than those not enrolled; there is no relation, however, between Sunday-school attendance and deception. It is to be regretted that the experiments did not investigate all-day religious schools, such as, the Lutheran or Catholic parochial schools. school and class morale, membership in clubs or

Therefore, the conclusion to be drawn from this vast testing program is that school children do cheat and lie, some to a greater extent than others. But surely, this was known before this investiga-tion took place. The lay mind is slightly be-wildered, the schoolmen probably lost in admiration at the excellence of the technique, the mass of carefully tabulated statistical data, but again, our friend, the cynic, can not be blamed for smiling contemptuously at the ridiculous mouse that the mountains have brought forth.

In fairness to the authors it must be admitted that they readily grant that any implications for moral education that arise from these studies are obviously tentative and incomplete. None the less their interpretations of results as stated in the form of propositions produced by scale and the statement of the s form of propositions need to be carefully examined. (pp. 412 ff.)

"I. No one is honest or dishonest by nature." Agreed. "Where conflict arises between a child and his environment, deception is a natural mode of adjustment, having in itself no moral significance. If indirect ways of gaining his ends are successful, they will be continued unless definite training is undertaken through which direct and honest methods may also become successful." But, very frequently in life direct and honest methods are not always successful; life is like that; there will always be the have's and the have-nots. Must we not then despair of inculcating habits of honesty in our then despair of inculcating habits of honesty in our children? And if deception has no moral significance, why worry about it all?



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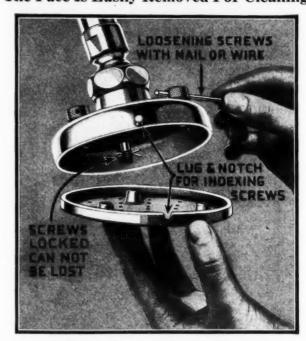
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"2. The mere urging of honest behavior by teachers or the discussion of standards and ideals of honesty... has no necessary relation to the control of conduct.... There seems to be evidence that such effects as may result are not generally good and are sometimes unwholesome." Then, the prevailing practice of giving ethical training in the school is all wrong, as indeed the authors contend in the third proposition. But isn't the "joker" in the above proposition, the little word necessary? Of course, there is no necessary connection between training and conduct. Try as we will, give the child an excellent heredity, perfect environment, yet despite it all he may turn out a bad lot. Of course, this introduces the question of "free will," and this, too, the investigators would probably reject as being of "no significance."

Ject as being of "no significance."

This review has already gone beyond the usual length. It is impossible to do justice to so important a book in less space. There has been no desire to minimize the work that has been done by Messrs. Hartshorne and May. Their scientific approach to the subject is deserving of great praise. As a study in experimental psychology, the book has value; but the reviewer must decline to join the general chorus of approbation and hail this as a significant contribution to the field of character training. He will probably be dubbed an obscurantist, a worshipper of ancient fetiches, such as "morality" and "free will," and he is content to be so named. To him the whole procedure seems a pursuit of the obvious. The time and energy and money spent in this investigation might better have been expended in discovering ways and means of motivating honesty in our schools.

been expended in discovering ways and means of motivating honesty in our schools.

Six chapters are devoted to the various subjects in the curriculum. Here the authors have done an excellent piece of work in gathering together historical data relative to the introduction of these subjects into the high-school course, as well as the modification that has taken place in their teaching due to various agencies. One chapter is devoted to the administration of the high school from the point of view of the teacher. Very suggestive learning exercises are placed at the end of each chapter that will undoubtedly stimulate class discussion. Bibliographical references are given in the footnotes and ographical references are given in the footnotes and are not buried at the end of chapters. The book will prove excellent for its purpose and will be of use not only for class purposes but also for administrators, teachers in service, and laymen interested

in modern trends in secondary education.

Algebra for Secondary Schools

By Stephen Emery and Eva E. Jeffs. Cloth, 640 pages. Price, \$1.85. D. Van Nostrand Co., New York, N. Y.

This book is distinguished by two features. It includes not only an elementary introduction to the subject, but also advanced work for third-year classes. The problem material is unusually com-plete and includes much practical material taken from the various engineering fields.

Adventures in Health
By Nathalie Forbes Moulton. Cloth, 140 pages.
Price, 70 cents. Published by Little, Brown, and Company.

This is a delightul children's book, printed in large type and illustrated in a handsome way. It tells the story of two children in the country who engage in interesting experiences and in healthful occupations. They learn much about wholesome food and about invigorating play.

The Test and Study Speller
By Daniel Starch and George A. Mirick.

book, 96 pages; second book, 64 pages; third book, 64 pages. Silver, Burdett & Co., Newark, N. J.

These books are a revision of a successful series, first published in 1921. Educational progress is so rapid that the authors have considered it necessary to the represent seigntifies. to thoroughly check the books with recent scientific findings in silent reading, as well as spelling, to introduce changes in the vocabulary, drills, and tests. The original plan of requiring the student to test his ability as a prerequisite to the study of words has been continued, but more emphasis is placed upon the learning process as the pupil's own

How to Classify Pupils
By William A. McCall and Harold H. Bixler.
Cloth, 83 pages. Published by the Bureau of Publications, Teachers College, Columbia University, New

York City.
Teachers will welcome this simple statement of procedures to be followed in using standard texts, and in interpreting findings therefrom for accurately assigning pupils to proper grades and

The Classics: Their History and Present Status in Education Edited by Felix M. Kirsch, O. M. Cap. Cloth, 279 pages. Price, \$3. The Bruce Publishing Company, Milwaukee, Wis.

This book presents a symposium on the classics as a vital factor in education and modern culture. The authors are members of the various branches of the Franciscan Order, and Catholic educators of prominence.

The first essay in the series occupies more than one half of the book and is an extremely compact but inclusive history of classical education in the church. The author brings to bear not only his own experience and study, but he has had the oppor-tunity of delving into European sources of information not readily available in this country.

The remaining essays take up the problem of college entrance teaching methods and textbooks on the training of teachers of the classics, and that vexing problem, the teaching of Greek.

Not the least important part of the book is a bibliography which is complete and contains many sources of information not readily available in the United States. The purpose of the essays, as outlined in the introduction, is to preserve universality of outlook and to secure a sane application of the modern pedagogy to the teaching of classics in the classrooms. The aim is splendidly achieved.

#### PUBLICATIONS RECEIVED

A Study of Placement Examinations. By H. P. Hammond and George D. Stoddard. Paper, 59 pages. Bulletin No. 7, March, 1928, issued by the University of Iowa, Iowa City. This study is intended to test the usefulness of the Iowa placement examination in engineering colleges and constitutes. examination in engineering colleges and constitutes examination in engineering colleges and constitutes a series of educational tests designed to measure the training and aptitude of students for subjects commonly included in the first year of this subject. The results of the examinations throw considerable light upon the much-mooted question as to the quality and extent of the scholastic preparation of students entering upon the study of engineering. In the final analysis, the study shows that the instructor of freshmen and sophomores can take nothing for granted in dealing with the fundamentals of the subject.

Forests and Water in the Light of Scientific Investigation. By Raphael Zon. Paper, 106 pages. Price, 20 cents. Published by the Government Printing Office, Washington, D. C.

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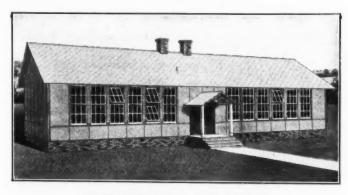
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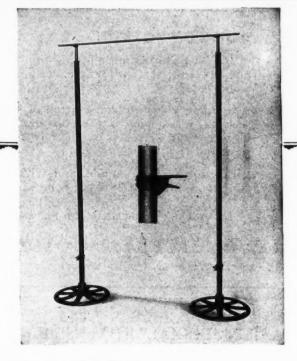
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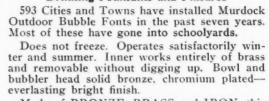
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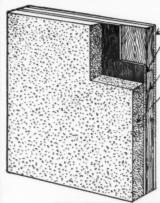
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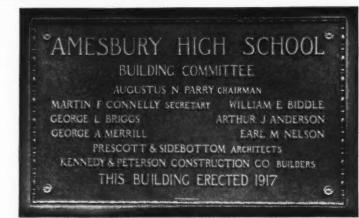
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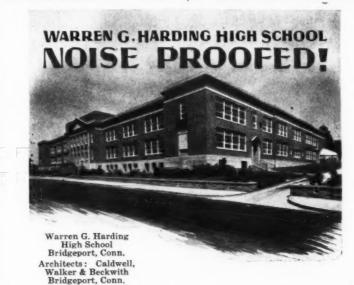
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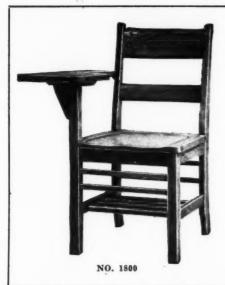
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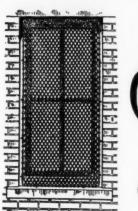
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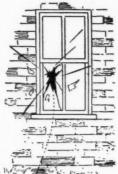
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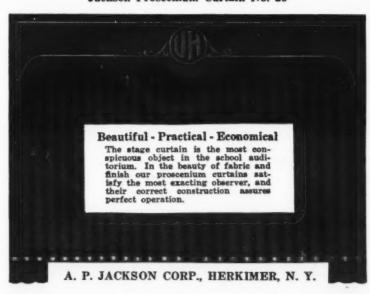
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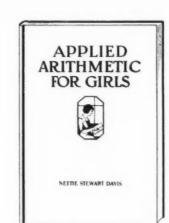
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#### CARROLL R. REED GOES TO MINNEAPOLIS

The board of education of Minneapolis, Minn., has at last selected a superintendent of schools to succeed Mr. W. F. Webster. The latter presented his resignation about a year ago, to take effect last summer, but the board encountered some difficulties in locating the man it wanted. There were those in the community who believed that a local man should be chosen should be chosen.



CARROLL R. REED Superintendent of Schools-Elect, Minneapolis, Minn.

The educator chosen for the Minneapolis position is Mr. Carroll R. Reed, of Bridgeport, Conn., an educator of outstanding promise. He has had twenty-two years of experience as principal and superintendent of schools, having served as principal at Newton, Mass., and as superintendent at Amherst, Mass., Rockford, Ill., Akron, Ohio, and Bridgeport. He was president of the New England Association of School Superintendents in 1927. In addition to his regular schoolwork, he taught school administration at Ohio, Harvard, and Yale Universities. Mr. Reed was born in Malden, Mass., in 1884. He is a graduate of Harvard University.

#### DR. GLASS HONORED

The Superintendent of the Lynchburg, Virginia, Public Schools, Dr. E. C. Glass, holds the unique distinction, in the United States, of having served the schools of his native city continuously for fifty years as their administrative head. His appointment to this office dates from January 9, 1879.

On January 9, 1929, the Lynchburg Teachers' Club and the Lynchburg School Board united in celebrating the semi-centennial of Dr. Glass's incumbency with a banquet in honor of the Superintend-ent, to which were invited the members of the State ent, to which were invited the members of the State Board of Education; the Division Superintendent of the State; officials of the State Department of Edu-cation; the heads of all the colleges in Virginia, both state and endowed; members of the City Coun-cil; officials of the City Government; former teach-ers and former members of the City School Board; former State Superintendents; distinguished educa-tors from outside of Virginia; many Lynchburg tors from outside of Virginia; many Lynchburg citizens of prominence; and the members of Dr. Glass's immediate family, including his brother, United States Senator Carter Glass, and his sister, Dr. Meta Glass, President of Sweet Briar College. The invitation extended was accepted by scores of



THE BUILDING IN WHICH DR. E. C. GLASS FIRST TAUGHT IN 1871, LYNCHBURG, VA.

those who had been especially invited, and between three and four hundred persons attended. The banquet was served in the Smith Memorial Hall of Randolph Macon Woman's College.

The program, with former Mayor Fred Harper, presiding, was participated in by Dr. Chas. G. Maphis, representing the University of Virginia, and other state colleges; President J. A. C. Chandler, representing the College of William and Mary; President Henry Louis Smith, representing Washington and Lee University; President Dice R. Anderson, representing Randolph Macon Woman's College; Hon. Harris Hart, representing the State Department of Education; Mr. A. L. Bennett, representing the Division Superintendents; Dr. N. A. Pattillo, representing the City School Board; Mr. C. L. DeMott, representing the City Council; Mr. B. E. Isley, representing the Teachers' Club, and Hon. Carter Glass and Dr. Meta Glass, representing the Superintendent's family. These brought greetings from their respective institutions and organizations. respective institutions and organizations.

There were present besides the speakers, Gen. Wm. There were present besides the speakers, Gen. Wm. H. Cocke, Superintendent of Virginia Military Institute; Dr. Julian H. Burruss, President of Virginia Polytechnic Institute; and many others of prominence in the educational, professional, and business circles of Virginia. Many letters and telegrams from invited friends and others conveying congratulations were read by the toastmaster.

ongratulations were read by the toastmaster.

Dr. Glass was the recipient of numerous gifts and other tokens of affection and esteem from the various departments of the educational system of the state and city, and from individual admirers. The celebration has been declared to have been one of the most notable affairs ever given in Lynchburg, and the only one of the particular character ever held in Virginia.



DR. E. C. GLASS

Dr. Edward C. Glass, superintendent of schools of Lynchburg, Va., who on January 9 completed his fiftieth year of service as superintendent of schools, was the guest of the local teachers' club and the school board at a banquet given in his honor. The program was in charge of Mayor Fred Harper of Lynchburg, who was assisted by Dr. Charles G. Maphis of the University, Pres. J. A. C. Chandler of William and Mary College, Pres. Henry L. Smith of Washington and Lee University, State Supt. Harris Hart, Dr. N. A. Pattillo, representing the city school board, and Dr. Meta Glass and Mr. Carter Glass, representing the superintendent's family.

Pres. Henry L. Smith of Washington and Lee University, State Supt. Harris Hart, Dr. N. A. Pattillo, representing the city school board, and Dr. Meta Glass and Mr. Carter Glass, representing the superintendent's family.

Dr. Glass became superintendent in January, 1879, when only 26 years of age. When he entered upon his duties, he presided over a staff of 23 teachers and a school enrollment of 1,539 pupils. In 1927-28, near the close of his fifty years of service, he was in charge of 247 teachers and 8,552 pupils, who were housed in 24 school buildings. The value of the school property is now \$1,625,000 and the total expenditures of the schools amount to \$433,046.

He took over his duties during the darkest period in the history of the schools, when the city council was then in power over the school system. During the spring of 1879 the councilmanic campaign was fought out on the school issue, with the result that the proschool faction won by a large majority. As a result of the victory, the high school was restored and the entire school system was revived and elevated to a new high standard.

Dr. Glass, in addition to his official work as head of the Lynchburg school system, and his participation in the organization and promotion of the summer-school movement, has served as a member of the board of visitors of the College of William and Mary, and on the board of the Virginia Normal and Industrial Institute.

Dr. Glass has visited practically all the leading school systems in the eastern part of the United States, and also the school systems of London, Glasgow, and Edinburgh. In recognition of Dr. Glass's long and useful service to the field of public education, William and Mary College and Washington and Lee University have conferred upon him the honorary degree of doctor of laws.

Dr. Glass was given many gifts and tokens of affection and esteem by the various departments of the educational system of the city and state.

### MR. ISAAC WINSLOW ELECTED SUPER-INTENDENT-EMERITUS

Mr. Isaac O. Winslow, superintendent of schools at Providence, R. I., for the last fifteen years, on January 13, was elected superintendent-emeritus of the city schools, the new title to become effective after his successor has been elected and assumes the office of superintendent.



ISAAC O. WINSLOW

Pending the selection of the new superintendent, Mr. Winslow will continue as the active head of the school system and will continue in office until such

time as his successor is chosen.

Mr. Winslow who is 72 years old, was elected superintendent of the Providence schools in 1913, succeeding Mr. R. J. Condon. Previous to that time he had been assistant superintendent for nearly

time ne had been assistant superintendent for nearly three years. For more than forty years he has been closely connected with the Providence schools as teacher, principal, and superintendent.

Mr. Winslow has been a student all his life and has contributed numerous articles on various subjects to the educational magazines. He has written a number of textbooks and has edited some supplementary school literature. His best known work is the Winslow geography.

the Winslow geography.

### NEWS OF SCHOOL OFFICIALS

—Mr. Eugene Melvin has been appointed as a member of the school board of Duryea, Pa., to succeed Stanley Shukit, who was recently removed. The new member has not been active in politics, which certain taxpayers contend does not place him in a position where he will have to take care of relitical friends.

on a position where he will have to take care of political friends.

—Mr. J. F. Nicholson of Columbia, Tenn., has been reelected as president of the board of education. Other officers elected were Mr. J. P. Greenlaw, vice-president, and Mr. R. L. Harris, secretary.

—Mr. William W. Martin, formerly president of the school board at Pottsville, Pa., has resigned.

the school board at Pottsville, Pa., has resigned. Mr. Martin had completed fifteen years of service as a member of that body.

—Mr. Chester A. Ide, who several years ago served on the school board of Wilkes-Barre, Pa., has announced that he will be an candidate to succeed William Cruttendon. It is predicted that Mr. Ide will line up with the majority faction which comprises Mr. J. H. Roughty and Mr. O. B. Pettebone.

which comprises Mr. J. H. Roughty and Mr. O. B. Pettebone.

—The following were elected members of the board of education of Salt Lake City, Utah: J. H. Lovesy, R. B. Ritchie, George H. Raybould, G. H. Backman, George F. Wasson, and Jesse N. Smith.

—Jed Stringham and R. W. Adams were elected members of the Davis county, Utah, board of education

cation.

—Supt. Emil Estenson of East Grand Forks, Minn., has been reelected for a fifth consecutive term, with a substantial increase in salary.

—At the annual meeting of the school board of East Grand Forks, Minn., Mr. R. L. Douglass was elected president; Mr. Tom Powers, treasurer; and Mr. R. F. Johnson, secretary.

—Mr. Sam Reaney, a member of the school board at Devils Lake, N. Dak., died at his home in that city on December 7, after a long illness.

—Mr. C. C. Hutchison has been reelected president of the school board at Sharpsville, Pa.

### NEW MEMBER OF ARCHITECTURAL FIRM

Mr. Oren Thomas, school architect, on January 1, became a member of the architectural firm of Proudfoot, Rawson & Souers. The new firm name is now Proudfoot, Rawson, Souers & Thomas. The offices are located at 810 Hubbell Building, Des Moines, Iowa.



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#### WHAT IS A FEVER?

WHAT IS A FEVER?

Mr. W. R. Hepner, superintendent of the Fresno, California, schools, a genial cojoker, tells a story on himself. It gives us, who are sometimes inclined to talk too much in class, a lesson.

"About ten years ago, when teaching a class of high-school freshmen in Chicago in physiology and hygiene, I made an effort one day to impart some technical information regarding the nature of a fever. My instruction was outlined somewhat as follows:

"'A fever is caused by a temporary "paralysis" of the sweat glands. If the sweat glands don't work, no sweat is secreted upon the skin; if no work, no sweat is secreted upon the skin; if no sweat is secreted on the skin, no evaporation of water can take place; if no evaporation of water takes place on the skin, there can be no reduction of the temperature of the skin. If there is no lowering of the temperature of the skin the blood which comes to the skin can not be reduced in temperature, and since the blood is continually receiving heat from oxidation in the organs of the body and this heat can not be got rid of in the skin, the temperature of the entire body rises above the normal and you have a fever.' the normal and you have a fever.'
"This was a perfectly logical presentation, of

course.

"The next day I was very much interested in finding out how effective my instruction had been, so in my most genial manner I asked: 'Who can tell me what a fever is?'

"A small but very energetic Bohemian girl in the rear of the room jumped up from her seat, frantically wig-wagging her hand and signaling with her lips in an effort to get my attention so with her lips in an effort to get my attention so that she would have an opportunity to demonstrate

that she would have an opportunity to demonstrate her knowledge.

"Nodding to her I said, 'All right, Mary, you tell us what a fever is.'

"Her reply was quick and certain: 'A fever is when you get hot and can't evaporate.'"

Putting on the Brakes
Supt. M. C. Potter of Milwaukee, occasionally uses the following story to illustrate the attitude of some teachers who "put on the brakes" whenever an innovation is introduced in the schools:

A green brakeman on the Colorado Mudline was making his first trip up Ute Pass. They were going up a very steep grade, and with unusual difficulty the engineer succeeded in reaching the top. At the station, looking out of his cab, the engineer saw the new brakeman, and said, with a sigh of relief:

"I tell you, my lad, we had a job getting up there,

"I tell you, my lad, we had a job getting up there,

didn't we?"

"You bet your life," said the new man, "and if I hadn't put on the brakes when we started, we'd have slipped back."

Internal Evidence
At a certain college custom ordains that at examination time each of the candidates shall write the following pledge at the bottom of his papers:

"I hereby declare, on my honor, that I have neither given nor received assistance during the examination."

One student after here

One student, after handing in one of the papers suddenly remembered that in his haste he had omitted to write the oath. On the following day he sought out one of the examiners and told him that he had forgotten to put the required pledge his paper.

The examiner looked at him over the top of his glasses and dryly remarked: "Quite unnecessary. Your paper in itself is sufficient evidence. I've just been correcting it!



"Once I tried that stunt of increasing my vocabulary by learning three new words a day."
"How'd you make out?"

"After a week or so nobody knew what I was talking about."

#### DOMSIE

Simple his habit, plain his wonted ration, Humble the roof that sheltered him at night. He sought no preferment of rank or station, Save but to be a bearer of the light. He dreamed out futures for the boys before him, And led them ever onward toward the goal. The heights they won the choicest gladness bore

Whose faces were enshrined within his soul.

In many a countryside and distant city
Were lived strong lives to which the light he gave.
Strong hearts beat and strong hands were reached

in pity
He taught to bless, to brighten, and to save.
Upon a quiet hillside he is sleeping,
Content to rest, the final school day o'er,
But everywhere his boys the faith are keeping.
They hold his torch aloft forevermore. -Clarence E. Flynn.



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#### DEATH OF MR. BAKER

DEATH OF MR. BAKER

Mr. Emerit E. Baker, president of the Kewanee Boiler Company of Kewanee, Ill., died at Hot Springs, Ark., on January 1, at the age of 73. Mr. Baker began his career as an office boy with the Anderson Steamer and Heater Company of Chicago, which later developed into the Kewanee Boiler Company in 1892, of which Mr. Baker has been president continuously for a period of over 36 years. With branches in every principal city of the country, under his direction, the business of the firm spread over the country and to the far quarters of the world.

Mr. Baker was born in Illinois in April, 1855, and

of the world.

Mr. Baker was born in Illinois in April, 1855, and attended the Aurora High School. At the age of 17 he went to Chicago as an office boy for the Anderson Steamer and Heater Company of Kewanee. In September, 1876, he came to Kewanee and entered the employ of the Hextun Steam Heating Company. In March, 1891, the name of the company was discontinued, and that of the Western Tube Company adopted. Of this company, Mr. Baker became vice-president, treasurer, and a director. In the spring of 1892 the company discontinued the manufacture of boilers and boilershop products. The parent company continued its career becoming identified with the National Tube Company.

career becoming identified with the National Tube Company.

The Kewanee Boiler Company, which was built up largely through Mr. Baker's energy, organizing capacity, and executive ability, has 1,300 workmen employed in the plant, with an annual payroll of \$2,000,000. Its products include steel power and heating boilers, Tobasco heaters, air receivers, tanks, and cast-iron radiators. It has thirty-three branches in the United States and Canada. in the United States and Canada.

### ISSUE NEW BOOKLET ON TOGAN-STILES PORTABLE SCHOOLS

The Togan-Stiles Company of Grand Rapids, Mich., has just issued a new booklet of thirty-two pages, illustrating and describing the Togan

pages, illustrating and describing the logan portable schoolhouses.

The Togan schools, although built for permanent use, are suitable for quick erection so as to provide for almost immediate relief from overcrowded classrooms and for contingencies arising from fire and other causes. In design, construction, and service, the Togan schools will give a lifetime of dependable service and will present a neat appearance in any community. ance in any community.

ance in any community.

The booklet contains plans, descriptions, and specifications for one, two, three, and four-room schools, together with construction details for the use of the architect and school official. Complete information and prices may be obtained by writing to the Togan-Stiles Company at Grand Rapids, Mich.

#### NEW CLARIN "PERFECT" FOLDING CHAIR

The Clarin Mfg. Company of Chicago, Illinois, has announced the marketing of its new "Perfect" folding chair. The chair which is built along the same lines as the Ideal, is designed to encourage

same lines as the Ideal, is designed to encourage correct posture.

The Clarin "Perfect" chair is made in three sizes for pupils up to 7 years, up to 9 years, and up to 14 years, with particular attention to the dimensions between the top of the seat and the top of the back. The chair is silent in operation and use, is indestructible, and will not slide away from the

occupant. The front feet are set to avoid tipping in case a pupil climbs onto it, and the back legs are spread to insure against the possiblity of tipping backward. In the design and finish of the chair, every care has been taken to make it a safe, durable, and hygienic seat for children below the ages and sizes accommodated.

Complete information and price may be obtained by writing to the Clarin Mfg. Company at 2456 North Crawford Ave., Chicago, Ill.

#### SEATING FIRMS UNITE

SEATING FIRMS UNITE

Consolidation of the Chatham Chair Manufacturing Company of Siler City, N. C., and the Standard School Equipment Company of Louisville to operate under the name, Standard School Equipment Company, with offices at Siler City, has been announced. Mr. W. O. Jones continues as President, and Mr. Junius Wren becomes secretary of the new company. By thus bringing both office and plant under one management, closer cooperation with customers and dealers is assured.

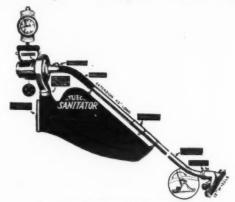
The Standard School Equipment Company will exhibit several new styles at the N.S.S.A. Convention in Chicago, and their new 1929 catalog will be ready for distribution at that time.

### DeVILBISS SPRAY GUNS USED BY SOUTH AMERICAN HEALTH AUTHORITIES

The DeVilbiss spray painting equipment, manufactured by the DeVilbiss Company of Toledo, Ohio, is being used by the health department of Rio Janeiro, South America, in the elimination of the yellow fever plague. The outfits are used in spraying a chemical mixture upon the walls of contaminated houses and buildings. The DeVilbiss equipment has made it possible to cover a much greater area in a shorter period of time.

#### NEW TUEC SANITATOR FOR CLEANING SCHOOLS

The United Electric Company of Canton, Ohio, has issued a useful four-page circular illustrating and describing the Tuec Sanitator for cleaning schools and public buildings. The Tuec Sanitator



NEW TUEC PORTABLE CLEANER

comprises seven useful, practical units in one, and may be used effectively for cleaning bare floors, furniture, paint and enamel, and as a blower for large buildings and factories.

The Tuec Sanitator is a practical, efficient, portable vacuum cleaner for schools and public buildings, weighing only 74 pounds in use.

Complete information and prices on the Tuec Sanitator may be obtained by writing to the United Electric Company at Canton, Ohio.

#### NEW WILSON SECTIONFOLD PARTITION FOR GYMNASIUMS

The J. G. Wilson Corporation of New York City has issued a four-page circular illustrating and describing its sectionfold partitions for gymnasium

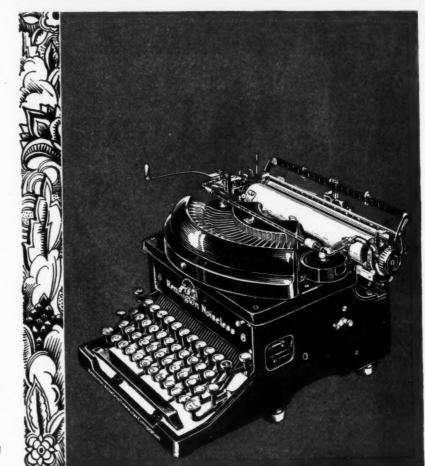
The sectionfolds for gymnasium use are thick, made with a smooth surface and without projecting hardware, either one or both sides. One side of the door is treated in this manner, while side of the door is treated in this manner, while the other side is paneled to harmonize with the room which it faces. Convenient shuttle doors are provided as a means of passage from one room to another eliminating the necessity of operating the partitions themselves. Doors may be placed on the stage to form a corridor, thus retarding the noise from penetrating to the auditorium from the gymnasium, or vice versa.

The Wilson Company manufactures a variety of types of disappearing door wardrobes, including the B, F, and G types. All of these are of the disappearing type, with continuous blackboard and rolling fronts inserted in the wall recess. Standard specifications and blue prints of each type are provided for the benefit of the architect and school official.

Complete information about the Wilson partitions may be obtained by writing to the J. G. Wilson Corporation at 11 East 38th St., New York City.



### schools should equip with ---



## REMINGTON NOISELESS

Leve Leve Leve Leve Leve Leve Leve

CHOOLS are training grounds for business. Whenever business universally adopts a product as superior to others of its kind, schools must adopt it and teach its use or their equipment becomes antiquated.

The Remington Noiseless marks a new era in typewriters. The business world has been quick to see its advantages of silent effortless action. In New York's financial district alone 28,000 Noiseless Typewriters are in use. Eventually Remington Noiseless will replace all other typewriters.

Is your school in step with the trend of the times? If not, call your local Remington Rand man. He'll demonstrate this quick, quiet machine without obligation at your convenience. Call on him today!





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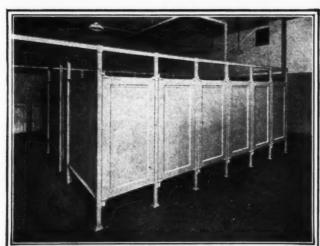
REMINGTON POWERS

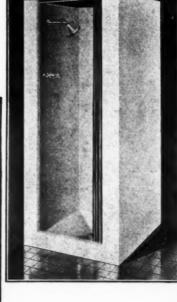
KARDEX KALAMAZOO RAND DALTON SAFE-CABINET BAKER-VAWTER

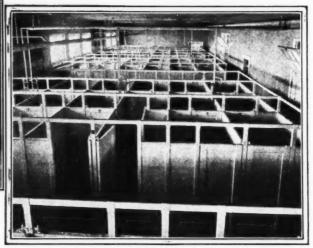


### UTILITY IS THE BASIC MEASURE OF VALUE

## The Time and the Place to Get Some Facts







ON order that you may settle in your own mind the comparative advantages of the various ideas in toilet and dressing room compartments, you need to see the actual equipment. This company will have a complete display at the N. E. A. in Cleveland, February 23 to 28, with competent men in charge to answer your questions.

Why not take this opportunity to get acquainted with some important facts? You will be under no obligation.

THE HENRY WEIS MFG. Co., INC. Elkhart, Indiana



## "Saves us at least 30% on our previous cost"

ONLIWON TOILET PAPER ONLIWON TOILET PAPER ONLIWON TOILET PAPER ONLIWON TOILET PAPER

THIS is the experience of a prominent hospital manager with Onliwon. "Saves a lot of toilet paper," says the manager of the First National Bank Building of Richmond, Va. Tests the country over show savings with Onliwon service ranging up to 50%. They say: "Fewer sheets required". "Five-inch width more satisfactory". "No temptation to use unnecessary paper". Let us send you actual data from leading institutions.

### Why this medically approved tissue is most economical

A. P. W. tissues are the unvarying standard of hundreds of institutions. The Purchasing Agents say: "First of all, cleansing tissues must be strong". Hundreds of these men tell us that after installing Onliwon, users unconsciously realize that fewer sheets are necessary. A. P. W. Onliwon assures economy by the very nature of its texture.

### Dispensed from unique, efficient cabinets

A. P. W. Onliwon cabinets are designed to dispense two sheets only at a time. Either rolls or ordinary flat sheets are illogical for your purpose. Handsome, readily-filled Onliwon cabinets furnish you the final safeguard in your job of cutting down maintenance expense.



### TOILET PAPER AND PAPER TOWEL SERVICE



Onliwon toilet paper cabinet in pressed steel, in nickel finish, Crodon plated, with lock and contents indicator. Also furnished in a variety of other models.

Inferior service, often put up with on the basis of "cost", records show—is invariably more expensive. There is no need to be content with it any longer. Let us give you further information about the money-saving features of Onliwon service. Just mail this coupon.

#### Please tear out this coupon

A.P.W. PAPER CO., Albany, N. Y.

We are interested in the story of Onliwon Toilet Paper. Without obligation to us, send us further data.

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